

# PHMSA IA-Desktop Basic Operations Workshop

Dec 2022

[IA Desktop Workshop Sequence](#)

[Objectives](#)

[Assumptions](#)

[Before you start](#)

[Lesson 1: Preliminary setup](#)

[STEP 1.1: Meet your team](#)

[STEP 1.2: Launch, login, and home tab](#)

[Lesson 2: Creating a new inspection in IA](#)

[STEP 2.1: Create a new inspection](#)

[Lesson 3: Configuring an inspection](#)

[STEP 3.1: Configuring a new inspection](#)

[STEP 3.2: Configuring a new inspection's properties](#)

[STEP 3.3: Configuring Operator IDs](#)

[STEP 3.4: Configuring Target Assets](#)

[STEP 3.5: Configuring relevant inspection links](#)

[STEP 3.6: Configuring team and roles](#)

[Presentation: Inspection Content and Planning Overview](#)

[Lesson 4: Planning Your Inspection](#)

[STEP 4.1: Planning interface orientation](#)

[STEP 4.2: Strategic plan – method 1](#)

[STEP 4.3: Strategic plan – method 2](#)

[STEP 4.4: Understanding planning counts](#)

[STEP 4.5: Implementing the plan](#)

[STEP 4.6: Modifying the plan](#)

[Lesson 5 Overview Tab](#)

[Lesson 5 IA Workflow](#)

[Step 5.1: IA Workflow: Assigning tasks](#)

[Step 5.2: IA Workflow: Completing tasks](#)

[Step 5.3: IA Workflow: Custom Tasks](#)

[Lesson 6: Inspection Tab Operations](#)

[Step 6.1: Inspection Tab Operations](#)

[Step 6.2: Question Layout](#)

[Step 6.3: Question change tracking](#)

[Step 6.4: Join your team on a single inspection](#)

[Lesson 7: Inspection Tab Operations](#)

[Step 7.1: Creating and finding Inspector's Notes](#)

[Lesson 8: Creating Results, tracking progress](#)

[Step 8.1: Creating Results](#)

[Step 8.2: Tracking Progress](#)

[Lesson 9: Creating and resolving conflicts](#)

[Step 9.1: Resolving Conflicts](#)

[Lesson 10: Attachments](#)

[Step 10.1: Requested Items](#)

[Step 10.2: File Attachments](#)

[Step 10.3: Attachment linking in context](#)

[Step 10.4: Exporting Attachments](#)

[Step 10.5: Viewing Attachments on a Map](#)

[Lesson 11: Reporting](#)

[Step 11.1: Reporting](#)

[Step 11.2: Reporting – Coverage Heatmap report](#)

[Step 11.3: Reporting – Coverage Heatmap report part 2](#)

[Explore the heatmap by taking the following steps](#)

[Step 11.4: Reporting – Coverage Heatmap report part 3](#)

[Presentation: IA Reports Overview](#)

[Lesson 12: Data Forms](#)

[Step 12.1: Creating Data Forms](#)

[Lesson 13: Final Challenges](#)

[IA Glossary](#)

[Please, help us improve this workshop.](#)

## IA Desktop Workshop Sequence

This workshop provides students with a guided series of exercises involving hands-on experience with the core components and functionality of the IA Desktop software and the system that supports it. IA supports several inspection methodologies, including Integrated Inspections, Standard Inspections, New Construction Inspections, etc. This workshop is not geared toward any specific methodology but is focused on the functional aspects of IA that, in turn, support the various inspection methodologies. For specifics on inspection process methodology, we refer you to process-specific documentation such as the Integrated Inspection User's Manual and to courses specific to those methodologies.

### Objectives

The student will:

1. Launch, login, and get to the homepage of IA-desktop.
2. Understand the IA application architecture.
3. Set up an inspection with correct configuration, add assets, and establish a team.
4. Plan an inspection.
5. Navigate the planned questions.
6. Add inspector's notes and results for inspection questions.
7. Identify and resolve data conflicts with other team members.
8. Monitor progress toward plan completion.
9. Assign tasks to other team members, complete them, etc.
10. Upload files (attachments).
11. Set up requested items.
12. Run reports.
13. Use the Coverage Heatmap tool.

While this workshop is designed to be worked through in a small group it is also adaptable to solo learning. The ideal group size is 2-5, both for helping each other and to better simulate the team-based inspection process IA supports. IA works for inspection teams of one, but learning how to assign and accept tasks, resolve data conflicts, etc. will be easier and more meaningful in a group.

### Assumptions



Depending on your learning scenario, the following are assumed to be true:

For classroom scenario (using TQ server)	For individual and/or non-TQ OJT
1. You have a functional IA account 2. Your password has not expired, and you remember it.	
A. Your account has been synced to the TQ server (this is typically done automatically prior to the workshop start).	A. You have IA PROD (Blue Icon) installed on your laptop and iPad.

<p>B. You have IA-EDU installed on your classroom laptop and iPad. The EDU installs have <b>Orange</b> branding.</p>	<p><b>Important:</b> When asked to create new inspections it's important to remember to flag them as "demo" so that they are not seen as actual inspections by the system. The instructions below will remind you to do this when the time comes.</p>
--	---

If the items above are not yet true for you, please stop and get those things sorted out prior to moving on.

### Before you start

The following pages include several lessons, each with multiple steps that will lead you through the key features and typical process checkpoints in IA. Some sections are to be worked alone; these are indicated by . Other sections involve a group effort; these are indicated by . From time to time, you'll see a **II** marker in places where you'll need to pause to let your team catch up, or where we intend to have a short presentation and Q&A on important points with the entire class. At most of these pause locations, there will be some optional challenges you can do while you wait.

If you have a question, let one of the workshop team members know and we'll assist you personally.

For future reference, note that you can reach out to [IA-support@dot.gov](mailto:IA-support@dot.gov) if you have any questions about using IA-Desktop.

## Lesson 1: Preliminary setup



### STEP 1.1: Meet your team

1. You should be arranged in groups of 2-4 people. Take a minute to get settled into your group and introduce yourselves.
2. If you are attending an in-person workshop, get seated such that each person can see their own screen and the screen of at least one other teammate. For remote options, feel free to have someone in the group share their screen while each person works on their own desktop.

**Tip:** For OJT single-trainees: Keep an eye out for specific instructions below for your situation. It will be a good idea to add your Supervisor to your inspection's team roster (instructions for that below) so they can easily find and help you with it.



### STEP 1.2: Launch, login, and home tab

1. Launch IA-Desktop and sign in.

**IMPORTANT:** Before proceeding, please confirm that you are using an EDU instance of IA. You can verify this by confirming your header is **orange** and the Training Server tab appears at the top of the application window. If this is not the case, please get assistance now before proceeding.



EDU data is purposely isolated from production data. Any changes you make here will **not** be reflected in the actual (live) inspection data. Your workshop is an opportunity to dive into IA, experiment and learn, and try new things without fear of impacting actual inspection records.



*PAUSE here and wait for your group to be ready before proceeding with creating a new inspection. While you wait, you can try the following explorations:*


1. Review the Help/Tools tab content and note the various support options and contacts.
2. Note who your Regional IA Support Representative is, also via the Help/Tools tab.

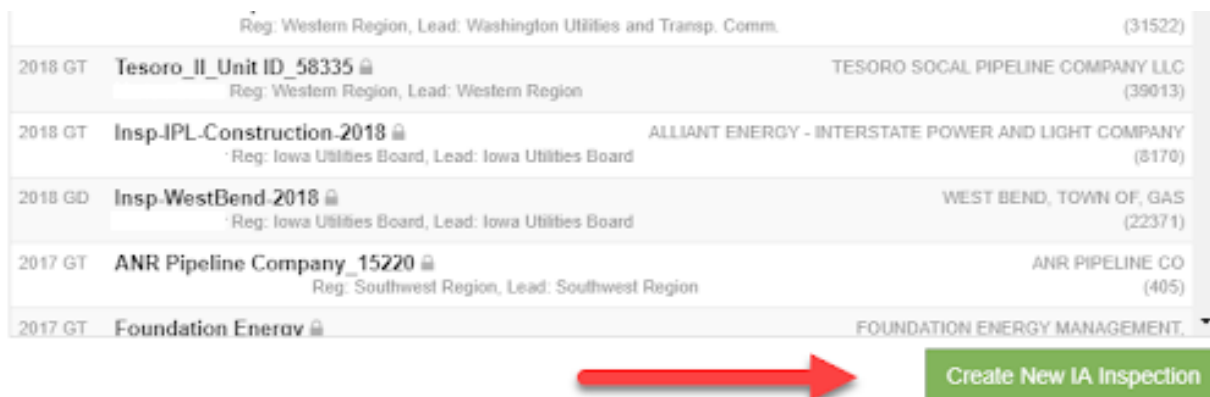
- Click on “Advanced tools” and note the location of the “Zip logs” button, which will send your IA Desktop application logs to the IA Support Team. There is no need to upload your logs right now, but it’s helpful to note where this button is. If you are experiencing issues with IA, the IA Support Team may ask you to upload your logs to help troubleshoot your issue. Note that you should not use any advanced tools without instruction to do so by IA Support.
- Explore the various filter options on the inspection list on the Home tab (years, org, system type, demo, locked, etc). Can you find any inspections that have different organizations for Reg (regulator organization) and Lead (lead organization)? (Hint: Look at inspections from regions with interstate agents.) Note that you will likely see many more locked inspections on the live, production version of IA Desktop. Because we are working on the training version right now, there are likely not a huge number of inspections to sort and filter through.
- Try using the text-box filter to search for inspections with certain words in the names, or for certain lead inspectors, etc.

## Lesson 2: Creating a new inspection in IA



### STEP 2.1: Create a new inspection

- Click the Create New IA Inspection button on the Home tab (  ).



Year	System Type	Inspection Name	Reg	Lead	Company	ID
2018	GT	Tesoro_IL_Unit ID_58335	Western Region	Western Region	TESORO SOCAL PIPELINE COMPANY LLC	(31522)
2018	GT	Insp-IPL-Construction-2018	Iowa Utilities Board	Iowa Utilities Board	ALLIANT ENERGY - INTERSTATE POWER AND LIGHT COMPANY	(39013)
2018	GD	Insp-WestBend-2018	Iowa Utilities Board	Iowa Utilities Board	WEST BEND, TOWN OF, GAS	(8170)
2017	GT	ANR Pipeline Company_15220	Southwest Region	Southwest Region	ANR PIPELINE CO	(22371)
2017	GT	Foundation Energy			FOUNDATION ENERGY MANAGEMENT	(405)

**Tip:** Both IA Desktop and IA Mobile are designed to be taken offline for work in areas where internet connections are not possible. However, the process of creating an inspection requires a connection so that the syncing server can set up the master records for the inspection and prepare for syncing to all team member devices.

- Set up your inspection. Take care to follow the guidelines below. This will help us remain on the same page during the training. You can always circle back later and set up new inspections for other system types and operators.
  - Use the **current year** for the expected start year.
  - Select **GT (Gas Transmission)** for system type.

- c. Select the **most recent federal PRS Set** (typically GT.20XX.OX) if more than one option is presented.
- d. Choose an operator. *The workshop facilitators will provide a particular OpID to use in this class. If you're working through this workbook independently and would like to match your inspection with the screenshots here, choose 15007 as an operator.*
- e. Give your inspection a name. **Important:** Include your own name in the name of the inspection. This is not a general requirement but will be helpful for training purposes.
- f. Inspections can be flagged as Demo (meaning demonstration) which designates them as non-production and will keep them from being used in reporting and metrics tracking. This is not necessary for TQ (Orange) installations.

**Important:** If you are NOT using the TQ (Orange) version of IA, you should flag your inspection as Demo.

**Tip:** Per the Record Retention Policy, demo inspections (and associated files) in the blue/production instance of IA will be automatically removed after 90 days of inactivity. IA will provide a reminder on the “create inspection” screen when the demo box is checked:

**Note:** Demo inspections will be automatically removed after 90 days of inactivity. This rule does not apply to Training (TQ) or Test/UAT environments.

For more information on the IA Record Retention Policy, please reach out to your IAT representative or [ia-support@dot.gov](mailto:ia-support@dot.gov)



## Create IA Inspection

Select operator IDs involved in this inspection. Note: IA system is updated with operator/unit data twice weekly.

Expected Start Year 

2022

System Type (Content Focus) 

GT

Protocol Revision Set 

GT.2022.04 - PHMSA HQ (Federal)

Primary Op ID (or Name)

15007

PACIFIC GAS & ELECTRIC CO (15007)

Inspection Name

Training Workshop - David King

Demo Flag 



Create Inspection

*Inspection setup: For training purposes, add your name to the inspection name. If you are NOT on the TQ Server (orange bar), check the Demo Flag.*

3. Depending on the operator you have chosen, you may see a warning about similar inspections (perhaps ones your teammates have just created). This is normal and can be ignored today. The purpose of this warning is to help inspectors avoid unintentionally re-creating the same inspection more than once in IA.
4. Once you are ready, compare notes with your teammates (to ensure you have selected the same operator, etc.). Press the Create Inspection button to create your new inspection. Your teammates will do the same, and the result will be that each of you will have a separate but similar inspection to work with in the upcoming steps.



*PAUSE here and wait for your team to be ready with their inspections. While you wait, explore the various sub-tabs on the configuration page (see below). Click on each help glyph to orient yourself to the purpose of each configuration control.*

**DEMO** Training Workshop - D... - 2022 ▾ <No Activity> TRAINING SERVER - for training only

[Home](#)
[Settings](#)
[Overview](#)
[Planning](#)
[Inspection](#)
[Forms](#)
[Reports](#)
[Attachments](#)
[Library](#)

View and change inspection configuration here. Only Directors, Supervisors and Leads can change inspection configuration properties.

[Inspection Properties](#)
[Operator IDs](#)
[Target Assets](#)
[Relevant Inspection Links](#)
[Team](#)
[Tools](#)

Set the inspection's name, organization, and content presentation options

Name	Training Workshop - David King
Start Year	2022
Created by	David King
Create date	12/29/2022 (<1 month old)
System Type	GT
Workflow Version	v2.0.0
Primary Operator Name	PACIFIC GAS & ELECTRIC CO
Protocol Revision Set Title	GT.2022.04
Protocol Revision Set ID	GT.2022.04 (v26.0.1) ?
Regulating Organization	California Public Utilities Commission ▾ ?
Lead Organization	California Public Utilities Commission ▾ ?
Planning Presentation	INTEGRATED ▾ ?

**Regulating Organization** ✕

This field should correspond to the organization that will be doing regulatory enforcement stemming from this inspection (if any). For federally regulated assets this is always the PHMSA Region or PHMSA HQ.

## Lesson 3: Configuring an inspection



### STEP 3.1: Configuring a new inspection

Inspection configuration is done via the configuration (⚙️) tab. This screen has several sub-tabs. The purpose of each is described below.

DEMO Training Workshop - D... - 2022 <No Activity> TRAINING SERVER - for training only

Overview Planning Inspection Forms Reports Attachments Library

View and change inspection configuration here. Only Directors, Supervisors and Leads can change inspection configuration properties.

Inspection Properties Operator IDs Target Assets Relevant Inspection Links Team Tools

Set the inspection's name, organization, and content presentation options

Name	Training Workshop - David King
Start Year	2022
Created by	David King
Create date	12/29/2022 (<1 month old)
System Type	GT
Workflow Version	v2.0.0
Primary Operator Name	PACIFIC GAS & ELECTRIC CO
Protocol Revision Set Title	GT.2022.04
Protocol Revision Set ID	GT.2022.04 (v26.0.1) ?
Regulating Organization	California Public Utilities Commission ?
Lead Organization	California Public Utilities Commission ?
Planning Presentation	INTEGRATED ?

**Inspection Properties:** View and set up the global properties of the inspection including name, regulating org, lead org, and if applicable, content presentation option.

**Operator IDs:** List relevant Operator IDs here. You'll need to include the OpIDs for every unit you intend to inspect. Some inspection systems have units from two or more OpIDs in them. You can always add more OpIDs here as needed.

**Target Assets:** Assets are the elements of the operator's infrastructure that will be targeted in this inspection. For federal inspections, these assets typically contain one or more inspection units. The results you collect will be applied to these assets. On this tab you can also select Exclusions to indicate certain topics that do not apply to or do not exist in the asset in question.

**Relevant Inspection Links:** IA can provide you a reference of past inspection results in your current inspection. This historical data can be used to pre-fill data forms and populate the Coverage Heatmap report. For this to work, you need to select inspections of interest on this tab. It is recommended that you check any recent inspection of relevance to your current inspection here. You can expand the set of available inspections by adding OpIDs to the List of OpIDs of interest on this tab.

**Team:** Set up your team and assign roles. Note that Workflow 2.0, which applies to many inspections processes in 2017 on, requires people in Lead, Supervisor, and Director roles.

**Tools:** This tab offers an option to delete this inspection. If you've accidentally created a non-demo inspection in the production (blue) version of IA, you can delete it and start over here.

We are going to work through each of these tabs and make configuration changes on most. Here are the steps you should take with your inspection today:

## STEP 3.2: Configuring a new inspection's properties

**Set up the Regulating and Lead Organizations.** For federal inspections, these will typically both be set to your region. For interstate inspections, the Regulating Organization will be the PHMSA region and the Lead Organization will be the state partner organization performing the inspection. For intrastate inspections, both will be set to the state organization.

Inspection Properties	Operator IDs	Target Assets	Relevant Inspection Links	Team	Tools
-----------------------	--------------	---------------	---------------------------	------	-------

Set the inspection's name, organization, and content presentation options

Name	Training Workshop - David King
Start Year	2022
Created by	David King
Create date	12/29/2022 (<1 month old)
System Type	GT
Workflow Version	v2.0.0
Primary Operator Name	PACIFIC GAS & ELECTRIC CO
Protocol Revision Set Title	GT.2022.04
Protocol Revision Set ID	GT.2022.04 (v26.0.1) ?
Regulating Organization	California Public Utilities Commission ?
Lead Organization	California Public Utilities Commission ?
Planning Presentation	INTEGRATED ?

**Tip:** It is important to get the Regulating and Lead Organizations set up correctly as other options in IA depend on them, and the data will be attributed to these organizations in downstream reporting.

The **Presentation option** may or may not be available depending on the system type of your inspection. For example, with Gas Distribution inspections, there are INTRASTATE and INTEGRATED presentations available. These Presentations drive the groupings and order in which the questions will be presented. The content is the same, the grouping and ordering of the questions is different. INTRASTATE organizes the material similar to how it was organized on legacy paper forms. INTEGRATED organizes the material according to **topic**. Unless you have a compelling reason to choose INTRASTATE, the INTEGRATED presentation is preferred as it places questions on related topics together which can help with the interview process. INTEGRATED presentation is also the standard (and only option) for HL and GT inspections and so if you work with those system types you will find it most familiar.

INTEGRATED is the only option for GT system type inspections, so that's what we will be using for this workshop.

**Tip:** The INTEGRATED presentation is simply a *topical ordering* of the content. It does not imply use of the Integrated Inspection process. That process does use the INTEGRATED presentation, but the presentation does not itself imply any particular process.

### STEP 3.3: Configuring Operator IDs

On this tab you can add additional OpIDs if the assets you expect to inspect on this inspection span multiple parent Operating entities. For now, no changes. Leave the Primary OpID as is.

Inspection Properties **Operator IDs** Target Assets Relevant Inspection Links Team Tools

\* Select operator IDs involved in this inspection. Note: IA system is updated with operator/unit data twice weekly.

Primary OpID: 15007 PACIFIC GAS & ELECTRIC CO 31 GAS units, 1 LNG unit

Other OpIDs:  ?

### STEP 3.4: Configuring Target Assets

Here is where you establish which parts of the operator's infrastructure will be included in this inspection. Currently IA integrates with only one source for infrastructure: The Pipeline Asset Manager (PAM). The federal units are managed in this system, and State Organizations also have the option of entering and managing units here. One advantage of using PAM to manage assets is that the units, and the various data fields for each unit, will be available in IA. If your organization does not use PAM to manage assets, you can select Other as the Source System and create custom units.

Please refer to the *Setup Guidance Sheet* provided to set up the assets for this scenario. Set exclusions as appropriate for these units. If you're working through this workbook independently and would like to best match your inspection with the screenshots here, you may add the following assets:

1. 88723 - Pleasant Creek
2. 88725 - Los Medanos
3. 85398 - Sonoma Division (exclude Bottle/Pipe - Holders)

To aid in demonstrations later in the workshop, please make sure that at least one exclusion is set for Bottle/Pipe - Holders.

### Exclusions ?

Excluded Topics ▼

remove

Excluded Topics ▼

remove

Excluded Topics (1) ▼

remove

Copy From...

**Excluded Component**

☐ Compressor Stations  
☒ Bottle/Pipe - Holders  
☐ Vault  
☐ Service Line  
☐ Gas Storage Field (Aboveground)

Exclusions can be modified at any time. In the end, your asset list should look something like this but perhaps with different unit numbers, labels, and exclusion counts.

Inspection Properties

Operator IDs

Target Assets

Relevant Inspection Links

Team

Tools

Assets are containers for one or more inspection units. If needed, you can create custom assets or placeholders for new construction or state inspections.

Source System	External IDs ?	Long Name	Short Name	Exclusions ?	
PHMSA/PAM ▼	88723 ▼ ⓘ	Pleasant Creek	88723 (55600001)	Excluded Topics (3) ▼	remove
PHMSA/PAM ▼	88725 ▼ ⓘ	Los Medanos	88725 (43003001)	Excluded Topics ▼	remove
PHMSA/PAM ▼	85398 ▼ ⓘ	Sonoma Division	85398 (10)	Excluded Topics (1) ▼	remove

↑

One unit per asset

↑

Leave one asset with no exclusions

**Tip:** It's a common error to create one asset with multiple units when you should make a separate asset for each. The only reason to cluster units into a single asset is when you are certain those units can be treated as one for all the questions you will ask. For example, a program inspection that only looks at procedure questions may be simplified this way.

Assets are containers for one or more inspection units. If needed, you can create custom assets or placeholders for new construction or state inspections.

Source System	External IDs ?	Full Name	Short Name	Exclusions ?	
PHMSA/PAM	12232 ⓘ	AR-1	12232	Excluded Topics (4) ▼	delete
PHMSA/PAM	39334 ⓘ	CHAPARRAL SYSTEM - EAST	39334	Excluded Topics (2) ▼	delete
PHMSA/PAM	3244 ⓘ	CHAPARRAL SYSTEM - WEST	3244	Excluded Topics ▼	delete
PHMSA/PAM	34 Units ⓘ	Other Units (Program)	Other Units	Excluded Topics ▼	delete

Add new Asset



A catch-all asset containing all other units to which process questions will apply

Another use for multi-unit assets is to accommodate all the units that you do not plan to visit in the field but for which the program/procedure questions will apply. This way, your inspection will give coverage on those questions to these un-visited units.

**Note:** Unless your inspection scope is large (10+ units) there is very little downside to creating separate assets for each unit so it is recommended to avoid multi-unit assets unless you know it is needed.

**Tip:** Assets may be re-ordered by dragging them up or down. The order your assets are presented here will be persisted throughout the application.

tion Properties Operator IDs **Target Assets** Relevant Inspection Links Team SMART Links Tools

re containers for one or more inspection units. If needed, you can create custom assets or placeholders for new construction or state inspections.

System	External IDs ?	Full Name	Short Name	Exclusions ?	
PAM	12232 ⓘ	AR-1	12232	Excluded Topics (4) ▼	delete
PAM	39334 ⓘ	CHAPARRAL SYSTEM - EAST	39334	Excluded Topics (2) ▼	delete
PAM	3244 ⓘ ⓘ	CHAPARRAL SYSTEM - WEST	3244	Excluded Topics ▼	delete

Asset



Hover the mouse over a row's whitespace to see the moving cursor. Click-drag the row to a new position.

**Tip:** If your assets are built from PAM-managed units, clicking the information glyphs next to the assets will show the data in PAM for that unit. This information will be kept current with PAM and will be available offline in IA.

**State Workshop Relevant Inspection**

Mission Division units

Overview Planning

View and change inspection configuration

Inspection Properties Operator

Assets are containers for one or more inspections

Source System External IDs

PHMSA/PAM 85398

PHMSA/PAM 88725

PHMSA/PAM 86275

Add new Asset

Mission Division

Unit ID 86275

Unit Name Mission Division

Unit Location

Pipeline Type Code DISTRIBUTION PRIVATELY OWNED

Operator ID 15007

Inspection System ID

Inspection System Name

Inspection System Type

Regulator's ID 03

Created Date 2017-10-30T12:27:00Z

Created By

Activation Date 2017-10-30T00:00:00Z

Unit Status ID 1 (Active)

Archived NO

Updated By

Updated Date 2018-01-25T18:45:00Z

PAM System Extract Date 2018-10-24T13:45:37Z

Record Location

Regulator Name CALIFORNIA PUBLIC UTILITIES COMMISSION

Jurisdiction Code

IRA Status

IRA Act Date

IRA Comments

IRA Rev Date

Total Pipeline Miles 2844.87

Total Right Of Way Miles 0

Class Location Miles 1 0

Class Location Miles 2 0

Class Location Miles 3 0

Class Location Miles 4 0

Miles Of Bare Pipe 0

Non Rural Right Of Way Miles 0

## STEP 3.5: Configuring relevant inspection links

**Relevant Inspection Links tab:** Use the Relevant Inspection List section to check at least one relevant inspection. If you don't see any in the list, add OpIDs of interest to the textbox provided until one does appear. Note: Only locked inspections will appear for linking. This is one reason locking inspections as soon as possible is a good idea; the data becomes available to fellow inspectors (and you!) on other inspections immediately.

Inspection Properties Operator IDs Target Assets **Relevant Inspection Links** Team Tools

Results from the completed inspections below may be of interest during your inspection. Select the ones you would like to cross-reference during this inspection.

List Op IDs of interest here

Include	Inspection	Lead Org/Lead Inspector	Year	Type	Primary Operator	Operator IDs
<input type="checkbox"/>	ops workshop 1902 -	Stu Dent1	2020	GD	PACIFIC GAS & ELECTRIC CO: 15007	15007
<input type="checkbox"/>	Lauren's Doc 7	PHMSA HQ / Lauren	2020	GD	PACIFIC GAS & ELECTRIC CO: 15007	15007
<input type="checkbox"/>	S Tester's IA Mobile non-demo	PHMSA HQ / Sally Tester	2020	GD	PACIFIC GAS & ELECTRIC CO: 15007	15007
<input checked="" type="checkbox"/>	(Demo) Locked inspection using GD 2021 02	PHMSA HQ / Julie	2021	GD	PACIFIC GAS & ELECTRIC CO: 15007	15007





## STEP 3.6: Configuring team and roles

Move on to the inspection team section and add a team member as Director to your inspection and all other group mates as Inspector roles. Leave yourself as Lead. Each of your group should do this to their own inspections. This will help us later, as you'll all be able to access each other's inspections to complete workflow tasks.

[Inspection Properties](#)
[Operator IDs](#)
[Target Assets](#)
[Relevant Inspection Links](#)
[Team](#)
[Tools](#)

Select team members and assign roles.

Name	Role	
David King	LEAD	<a href="#">remove</a>
Stu Dent1	DIRECTOR	<a href="#">remove</a>
Stu Dent2	INSPECTOR	<a href="#">remove</a>
Stu Dent3	INSPECTOR	<a href="#">remove</a>
+	INSPECTOR	

**Note:** At present, the IA Workflow system expects at least a Lead and Director role for each inspection. Note that the Director role is an approval role and could suitably be filled by any supervisor or other person with approval authority. In other words, roles in IA do not necessarily have to align with a person's overall position/job title.



*PAUSE and help your group members get to this point if they are not already here. Here are some additional exercises to try while you wait for the rest of the class.*

1. Click the Overview tab and add some temporary summary text for this inspection.
2. Look at the summary for the related inspections (also available on the Overview tab).

[Home](#)
[Settings](#)
[Overview](#)
[Planning](#)
[Inspection](#)
[Forms](#)
[Reports](#)
[Attachments](#)

Inspection Summary Training Workshop - DK

start year 2022 lead David King regulator organization California Public Utilities Commission

Provide executive summary of plan rationale, portions of system inspected, synopsis of concerns and

Click to edit.

Training workshop summary.

3. Return to the configure (⚙️) tab, and check out each sub-tab. Click on each help glyph and read the contents.

View and change inspection configuration here. Only Directors, Supervisors and Leads can change inspection configuration properties.

Inspection Properties | Operator IDs | Target Assets | Relevant Inspection Links | Team | Tools

Set the inspection's name, organization, and content presentation options

Name: Training Workshop - David King

Start Year: 2022

Created by: David King

Create date: 12/29/2022 (<1 month old)

System Type: GT

Workflow Version: v2.0.0

Primary Operator Name: PACIFIC GAS & ELECTRIC CO

Protocol Revision Set Title: GT.2022.04

Protocol Revision Set ID: GT.2022.04 (v26.0.1) ?

Regulating Organization: California Public Utilities Commission

Lead Organization: California Public Utilities Commission ?

Planning Presentation: INTEGRATED ?

Sub-tabs

Help glyph

Protocol Revision Set ID

This is the identifier for the specific set of questions available in this inspection. Inspections with different PRS IDs will have different question content available.

**Tip:** You can quickly access your five most recently visited inspections via the menu in IA's header. This is useful if you are switching between a few inspections frequently.

DEMO Training Workshop - D... - 2022 <No Activity>

DEMO Training Workshop - David King - 2022

DEMO Training Workshop - Sally Smith - 2022

DEMO GT.2022.04 Test - 2024

Training Manual - Janeal - 2022

Historical GT Inspection - 2022

Start Year: 2022



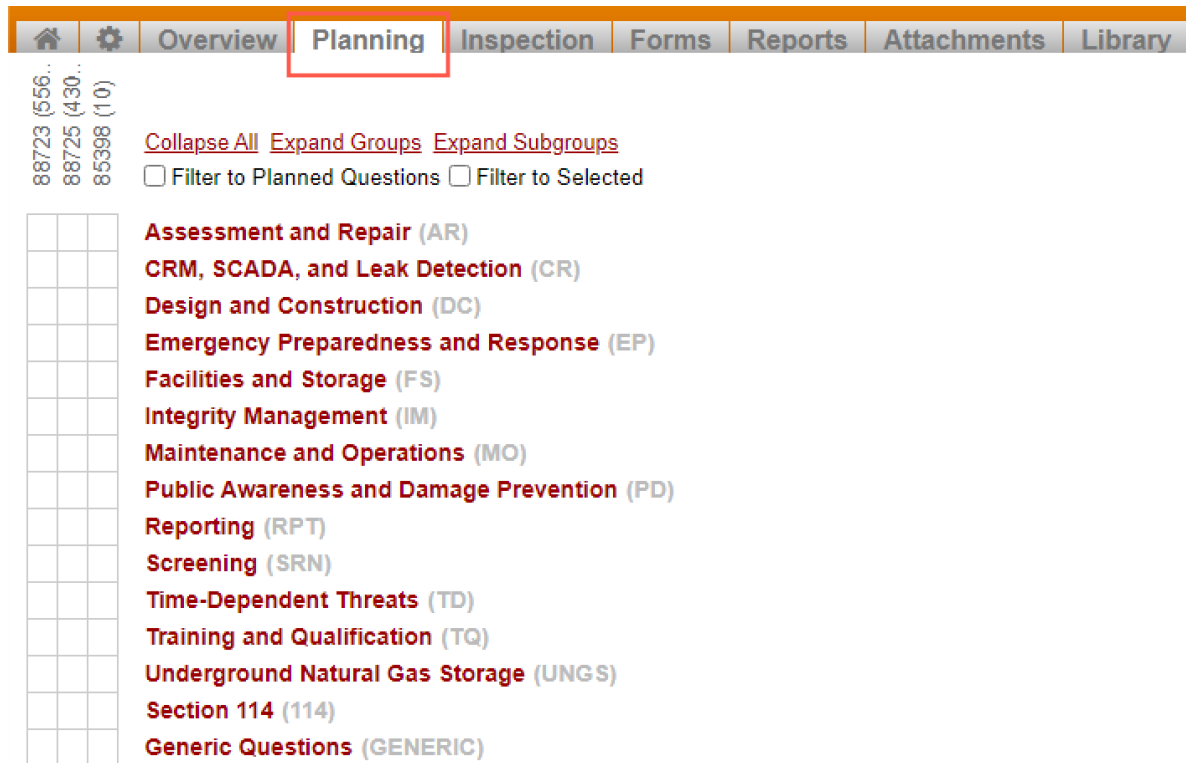
## Presentation: Inspection Content and Planning Overview


Notes:

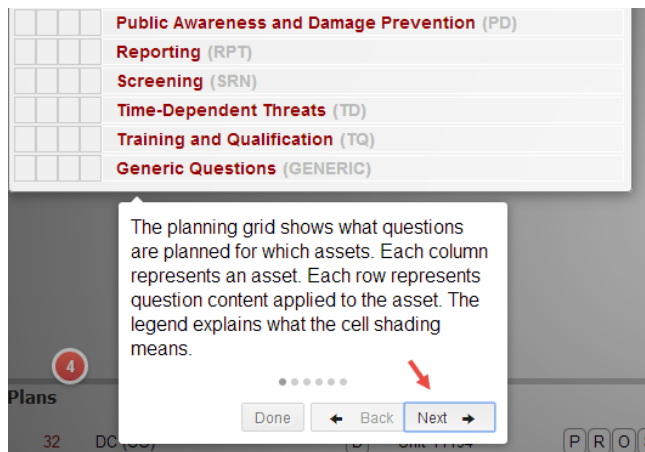
## Lesson 4: Planning Your Inspection

### STEP 4.1: Planning interface orientation

You will now plan your inspection. This is done on the Planning tab. Planning is one area where the inspection methodology you are using will have a significant impact on what you do.



First, orient yourself to the planning interface by pressing the help button  and reading the annotations for each.



After reading each annotation, click the Next button to move onto the next part of the interface.

In some inspection methodologies, setting up a plan is a matter of picking a single directive for a single unit. In others, the plan depends on your preliminary assessment of the operator's strengths and weaknesses and could involve numerous targeted topic areas. As such, planning can be a complex, iterative process. IA takes a divide-and-conquer approach by separating the strategic plan (content

applied to assets) and the tactical plan (implementation of the strategic plan). It can be helpful to think of the left-hand pane as the WHAT and the right-hand pane as the HOW of your overall plan. These are separate concerns and IA keeps them separate.

### STEP 4.2: Strategic plan – method 1

In this workshop we will not produce a targeted plan typical for the Integrated Inspection methodology. We will also not create the simplest possible plan. Instead, for the purposes of pragmatic training on IA operations, we will select a plan somewhere in the middle of the spectrum. We will create the same strategic plan two different ways and discuss the pros and cons of each.

For the moment, we intend to perform a baseline inspection on all three of our assets. Let's set that up.

Steps:

1. Click the Add Plan Item link to create a new plan item.

#### Plan Items

To start planning, [add a plan item](#).

#### Planning Alerts 0

R Connected 0 0 All items are up-to-date with the server.

2. Select all three of the 'Baseline' Directives.

**Reporting (RPT)**  
**Screening (SRN)**  
**Time-Dependent Threats (TD)**  
**Training and Qualification (TQ)**

- ☐ 2019 Gas Rule
- ☐ Field Observations Review
- ☐ Initial Inspection
- ☐ Small System Key Risks
- ☐ New Construction
- ☐ GT IM Implementation
- ☐ Gas Storage Field Inspection (Aboveground)
- ☐ Control Room Management
- ☐ GT IM
- ☐ Core
- ☐ Pipeline Commissioning
- ☒ Baseline Procedures (Form 1)
- ☒ Baseline Records (Form 1)
- ☒ Baseline Pipeline Field Inspection (Form 1)

Plan Item: Baseline Procedures (Form 1), Baseline Records (For...)

Select Asset(s) [P] [R] [O] [S]

[Add Plan Item](#)

3. Select all three assets.

**Plan Items**

Baseline Procedures (Form 1), Baseline Records (For...)

All Assets [P] [R] [O]

[Add Plan Item](#)

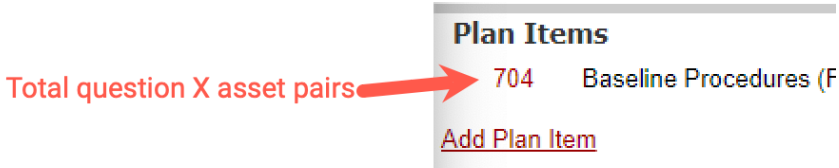
Your plan item list should now look something like this:

**Plan Items**

704 Baseline Procedures (Form 1), Baseline Records (For... All Assets [P] [R] [O]

[Add Plan Item](#)

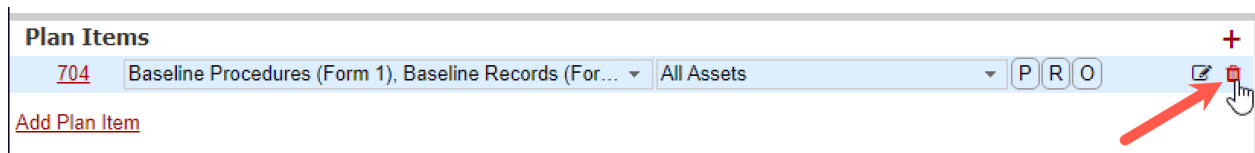
The red number on the left may differ in your case. This is the total count of question \* asset results that must be collected to complete this plan. This number corresponds to the question-level cells in the planning grid that have been planned.



At this point our strategic plan is done, and we could move on to creating our tactical (implementation) plan. However, there are some downsides to how this plan is set up. Let's set it up another way, with one plan item for each asset.

## STEP 4.3: Strategic plan – method 2

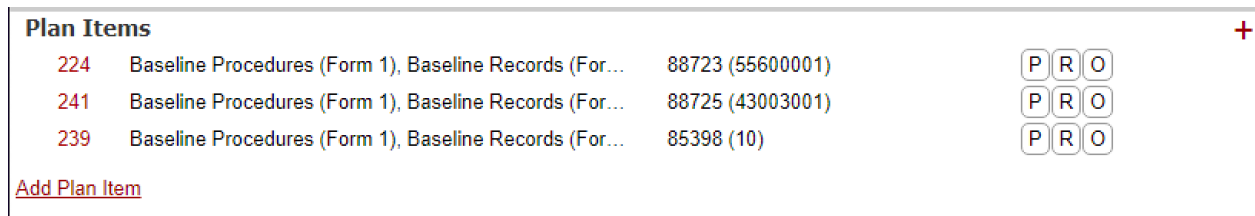
1. Delete the plan created in the previous step by clicking the trashcan icon on the far right.



2. Create a new plan item.
3. Select all three Baseline directives.
4. Select only one of the three assets.

Repeat steps 2-4 for each asset.

Your plan should now look like the following. Again, the numbers on the left may differ; that's OK.



In this case the exact same questions have been planned for the same assets as in Method 1 in the previous step. However, this approach has the following benefits:

1. You can see the different counts (explained below) for each asset.
2. You can create asset-specific notes for each plan item. Let's do that now. Click the note icon for your first plan item.

Enter plan notes here for your inspection team to read while collecting results for this plan item.

Plan Items			
224	Baseline Procedures (Form 1), Baseline Records (For...	88723 (55600001)	P R O
241	Baseline Procedures (Form 1), Baseline Records (For...	88725 (43003001)	P R O
239	Baseline Procedures (Form 1), Baseline Records (For...	85398 (10)	P R O

[Add Plan Item](#)

Once at

3. Enter a plan note and close the edit window.

Plan Items			
224	Baseline Procedures (Form 1), Baseline Records (For...	88723 (55600001)	P R O
<i>This is the plan note for asset 88723.</i>			
241	Baseline Procedures (Form 1), Baseline Records (For...	88725 (43003001)	P R O
239	Baseline Procedures (Form 1), Baseline Records (For...	85398 (10)	P R O

[Add Plan Item](#)

Of course, you could extend this approach to a total of ten different plan items if you wanted to address each directive/asset pair separately. It's up to you; the resulting plan is the same either way.

The disadvantage of creating many planning items is that, for large plans, the list can become long and difficult to manage.

## STEP 4.4: Understanding planning counts

Let's address the numbers we are seeing to the left of the plan items. As mentioned above, these are counts of question \* asset pairs. If you click on any of these numbers, the planning grid will expand and filter to just the rows (questions) planned in that plan item.

88723 (55600001) 88725 (43003001) 85398 (10)

[Collapse All](#) [Expand Groups](#) [Expand Subgroups](#)  
☐ Filter to Planned Questions ☐ Filter to Selected

**Assessment and Repair (AR)**  
 Repair Criteria (O&M) (AR.RCOM)  
 Confirmatory Direct Assessment (AR.CDA) (AR.EC)  
 External Corrosion Direct Assessment (ECDA) (AR.EC)  
 Internal Corrosion Direct Assessment (ICDA) (AR.IC)  
 Stress Corrosion Cracking Direct Assessment (SCCDA) (AR.SCC)  
 In-Line Inspection (Smart Pigs) (AR.IL)  
 Low Stress Reassessment (AR.LSR)  
 Integrity Assessment Via Pressure Test (AR.PTI)  
 1. Does the process require that operator/vendor personnel (including supervisors) who review and evaluate pressure test assessment results meet appropriate training, experience, and qualification criteria? (192.915(a)) AR.PTI.PRESSTESTREQUAL.P  
 2. Do records demonstrate that operator/vendor personnel, including supervisors, who conduct or review pressure test assessment results are qualified for the tasks they perform? (192.947(g)) AR.PTI.PRESSTESTREQUAL.R  
 3. Were test acceptance criteria and processes sufficient to assure the basis for an acceptable pressure test? (192.503(a)) AR.PTI.PRESSTESTACCEPT  
 4. Do the test records validate the pressure test? (192.517(a)) AR.PTI.PRESSTESTRESULT.R  
 5. If the pipeline operates using an alternative maximum allowable operating pressure per 192.620 (80% SMYS Rule), from a review of selected records, were required pressure test assessments performed? (192.517(a)) AR.PTI.PRESSTESTAMOP.R  
 6. From field operations was the pressure test performed in accordance with Subpart J requirements and the process requirements? (192.503(a)) AR.PTI.PRESSTESTCOMPLETE.O  
 7. Does the process adequately account for taking required actions to address significant corrosion threats? (192.933) AR.PTI.PTICORR.P  
 8. Do records demonstrate that required actions are being taken to address significant corrosion threats as required? (192.933) AR.PTI.PTICORR.R  
 9. Do the procedures for selecting pipeline assessment methods specifically include spike hydrotests as the assessment method for detecting time-dependent threats? (192.506(a)) AR.PTI.SPIKEHYDRO.P  
 10. Where time-dependent threats were an identified risk, do the records indicate that a spike hydrotest was performed to "clear" any cracks that might otherwise grow during pressure reductions after the hydrostatic test? (192.506(a)) AR.PTI.SPIKEHYDRO.R  
**Other Technology (AR.OT)**  
 Predicted Failure Pressure (AR.PFP)  
 Dynamic Analysis (MDA) (AR.DA)

**Plan Items**

224	Baseline Procedures (Form 1), Baseline Records (For...	88723 (55600001)	P R O
<i>This is the plan note for asset 88723.</i>			
241	Baseline Procedures (Form 1), Baseline Records (For...	88725 (43003001)	P R O
239	Baseline Procedures (Form 1), Baseline Records (For...	85398 (10)	P R O

[Add Plan Item](#)

**Implementation Activities**

Once at least one plan has been created, [add implementation activities](#) to implement your plan.

Legend: Unimplemented (white), Implemented (black), Full (red), Partial (grey). \*Full = planned or excluded.



If you scroll down through the grid, you'll see the reason behind the different counts. IA is following the exclusions you set up during Asset configuration and is automatically avoiding creating plans for items that are not relevant for the specific assets.

This question is excluded for 88723 (55600001) due to exclusion settings for Location: Onshore

4. Does the process require railroad or highway casings to be in accordance with the requirements of 192.323? (192.303) DC.CO.INSPECTGEN.P

5. Do field observations confirm railroad or highway casings are being installed as designed and specified, and in accordance with 192.323? (192.323) DC.CO.CASING.O

6. Does the process require that pipeline joints (to be made other than by welding) be designed and installed in accordance with 192.273? (192.303) DC.CO.NONWELDJOINT.P

7. Does the process require plastic pipe joints to be designed and installed in accordance with 192.281? (192.303) DC.CO.PLASTICJOINT.P

*This question is excluded for the first asset, leading to a different question \* asset pair count for that plan item.*

Spend some time expanding the planning grid to see what the effects of your plan are on the cell shading of the grid. Solid shading indicates that every question below that level is included in the plan. Checkered shading indicates that only some of the questions are included.



*Cell shading indicates partial or full coverage.*

12/59 questions planned

12. Does the process require railroad or highway casings to be in accordance with the requirements of 192.323? (192.303) DC.CO.INSPECTGEN.P

13. Do field observations confirm railroad or highway casings are being installed as designed and specified, and in accordance with 192.323? (192.323) DC.CO.CASING.O

14. Does the process require that pipeline joints (to be made other than by welding) be designed and installed in accordance with 192.273? (192.303) DC.CO.NONWELDJOINT.P

15. Does the process require plastic pipe joints to be designed and installed in accordance with 192.281? (192.303) DC.CO.PLASTICJOINT.P

*Hover over any cell to see how many questions are planned for that asset/content combination.*

You'll notice that all your cells are colored red at this point. This is because your strategic plan has not yet been included in a tactical implementation plan. In fact, at this point, you have no implementation plan at all. Let's set that up next.

## STEP 4.5: Implementing the plan

We will now *implement* the plan. That is, set up implementation activities that capture various parts of the plan until every asset/question pair is captured by at least one activity.

Click Add Implementation Activity to add each activity.

1. Add activities as follows:
  - a. One Office activity for all assets for the P and R questions.
  - b. A Field activity for each of the single-unit assets covering the R and O questions.
  - c. Enter some start and end dates for all your activities. This can help with planning awareness among your team members and is required for inspection validation.

After this, your implementation activities should look like this:

Implementation Activities						
590	Office	12/29/2022		12/31/2022		
	(All Directives)	(All Groups)	(All Assets)	P	R	O +
95	Field - 88723	01/02/2023		01/04/2023		
	(All Directives)	(All Groups)	88723 (556000...	P	R	O +
104	Field - 88725	01/05/2023		01/07/2023		
	(All Directives)	(All Groups)	88725 (430030...	P	R	O +
103	Field - 85398	01/16/2023		01/19/2023		
	(All Directives)	(All Groups)	85398 (10)	P	R	O +

**Important:** When setting up activities it is best to set up the *minimum* filters that capture what you want to cover during that activity. You do not need to match your strategic plan exactly. Think of your Implementation plans as a net to capture your plan. It is ok to over-implement certain aspects of your plan (as we have done with the R questions here). You will not have to answer questions more than once, and some results may require multiple visits to set up.

**Tip:** As you add activities, the question/asset counts for your plan will transition from red (unimplemented) to grey (implemented). You can click the grey and red numbers to see the corresponding questions highlighted in the grid.

**Plan Items**

Count	Asset ID	Asset Name	Asset Count	Buttons
193	31	Baseline Procedures (Form 1), Baseline Records (For...	88723 (55600001)	P R O
<i>This is the plan note for asset 88723.</i>				
241		Baseline Procedures (Form 1), Baseline Records (For...	88725 (43003001)	P R O
200	39	Baseline Procedures (Form 1), Baseline Records (For...	85398 (10)	P R O

*Unimplemented count* (points to 31)

*Implemented count* (points to 200)

The total counts of question/asset pairs will switch from unimplemented (red) to implemented (grey) as the plan is captured by your implementation plan.

PAUSE and help your group members get to this point if they are not already here. Here are some additional explorations to try while you wait.

1. Try to expand and collapse groups and subgroups of questions, and try the filter checkboxes above the grid.

Collapse All Expand Groups Expand Subgroups

☐ Filter to Planned Questions ☐ Filter to Selected

**Assessment and Repair (AR)**

**CRM, SCADA, and Leak Detection (CR)**

**Design and Construction (DC)**

2. See if you can find additional excluded questions in the planning grid (it will display as an X). These questions will not be planned for the corresponding assets even if there is a plan item that would normally plan them. Excluded topics are automatically blocked from planning.

X	X	
X	X	
X	X	

4. Does the process require plan...
5. As applicable to the project, c...
6. As applicable to the project, a...

3. Try Ctrl+click (or click + ctrl) on a grid cell that corresponds to a Group, Subgroup, or question. What effect does it have for each?

## STEP 4.6: Modifying the plan

Since we've already done planning via directive, let's select the content via subgroup this time. And on top of that, we'll use a shortcut to create the plan item.

Let's suppose you were later asked to also perform a Construction Weld Inspection on one of the assets in your inspection. Let's augment the strategic and implementation plans to accommodate this request.

1. Expand the planning grid to show the DC group.

			<b>Design and Construction (DC)</b>
			Compressor Station Construction (DC.COCMP)
			Construction (DC.CO)
			Construction Weld Inspection (DC.WELDINSPI)
			Construction Welding Procedures (DC.WELDPROCEDURE)
			Design of Pipe (DC.DP)
			Design of Compressor Stations (DC.DPCCMP)
			Design of Pipe - Overpressure Protection (DC.DPCOPP)
			Design of Pipe Components (DC.DPC)
			Gathering (DC.GA)
			Maintenance and Operations (DC.MO)
			Materials (DC.MA)
			Pressure Testing (DC.PT)
			Spike Hydrotest (DC.SPT)
			Pressure Testing - Low Pressure (DC.PTLOWPRESS)
			Special Permits (DC.SP)
			Training and Qualification (DC.TQ)

Note how the Construction Weld Inspection (DC.WELDINSPI) subgroup is already showing as partially implemented for all assets. This is because there are questions in the planned baseline directives present in the Weld Inspection subgroup. Our next step is to plan the *entire* subgroup for one of our assets.

- Place your mouse pointer over one of the DC.WELDINSP cells, and press Ctrl (on the keyboard) then click the mouse button. This will automatically create a new plan item for that asset.

5/9 questions planned

Ctrl + Mouse click

9/9 questions planned

Plan Items			
224	Baseline Procedures (Form 1), Baseline Records ...	88723 (55600001)	P R O
	<i>This is the plan note for asset 88723.</i>		
241	Baseline Procedures (Form 1), Baseline Records ...	88725 (43003001)	P R O
239	Baseline Procedures (Form 1), Baseline Records ...	85398 (10)	P R O
9	DC (WELDINSP)	88725 (43003001)	P R O

[Add Plan Item](#)

The question \* asset pairs corresponding to the WELDINSP questions applied to the 88725 asset have already been implemented via the Office activity (P/R questions) and the 88725 Field visit activity (R/O questions). The implementation counts for those activity have risen accordingly.

Implementation Activities						
591	Office	12/29/2022		12/31/2022		
	(All Directives)	(All Groups)	(All Assets)	P	R	O +
95	Field - 88723	01/02/2023		01/04/2023		
	(All Directives)	All Groups	88723 (556000...	P	R	O +
108	Field - 88725	01/05/2023		01/07/2023		
	(All Directives)	All Groups	88725 (430030...	P	R	O +
103	Field - 85398	01/16/2023		01/19/2023		
	(All Directives)	All Groups	85398 (10)	P	R	O +
<a href="#">Add Implementation Activity</a>						

Even though our strategic plan is fully implemented, in certain situations you may wish to send an SME out on a separate activity to perform the Construction Weld inspection. An activity focused on those questions can be set up as follows:

1. Click the Add Implementation Activity link.
2. Create a separate activity for the DC.WELDINSP subgroup content against the asset in question.

**Implementation Activities**

591 Office (All Directives)

95 Field - 88723 (All Directives)

108 Field - 88725 (All Directives)

103 Field - 85398 (All Directives)

708 Activity Name (All Directives)

DC (WELDINS) (All Assets) (All Types) +

[Add Implementation Activity](#)

It is important to note a limitation here. IA does not separate the implementation plans. The Weld Inspection on 88725 plan overlaps with the Field – 88725 plan. This may be problematic, especially if the Weld Inspection activity comes after the Field activity. While it is expected at times for different inspectors to develop results over multiple activities, this sort of overlap can be confusing.

**Implementation Activities**

591 Office 12/29/2022 12/31/2022 (All Directives) (All Groups) (All Assets) P R O +

95 Field - 88723 01/02/2023 01/04/2023 (All Directives) All Groups 88723 (556000... P R O +

108 Field - 88725 01/05/2023 01/07/2023 (All Directives) All Groups 88725 (430030... P R O +

103 Field - 85398 01/16/2023 01/19/2023 (All Directives) All Groups 85398 (10) P R O +

19 WELDINS on 88725 01/01/2023 01/04/2023 (All Directives) DC (WELDINS) 88725 (430030... (All Types) +

[Add Implementation Activity](#)

Here are some mitigation approaches when this situation arises:

1. Arrange for the more specialized inspection activity to occur first.
2. Ensure good communication between the teams performing these activities; make them aware of the overlap and establish a consensus on how they will handle it.
3. Set up an inspection note on the respective plans to communicate intentions in-field.

241	Baseline Procedures (Form 1), Baseline Records ...	88725 (43003001)	P R O
<div style="border: 1px solid orange; padding: 5px;"> <i>Please leave any DC.WELDINSR results as 'pending' until the SME finalizes them.</i> </div>			
<div style="background-color: red; color: white; padding: 2px 5px;">Remove Note</div>			<div style="border: 1px solid gray; padding: 2px 5px;">Close</div>
239	Baseline Procedures (Form 1), Baseline Records ...	85398 (10)	P R O
9	DC (WELDINSR)	88725 (43003001)	P R O

4. Use the Pending result value to ensure both teams see the questions during inspection (if that is intended).
5. Set up more specific plan implementations to better isolate the content to the respective assets (not always possible, but it is in this case).

**Implementation Activity**

591 Office  
(All Directives)

95 Field - 88723  
(All Directives)

108 Field - 88725  
(All Directives)

**All/None**

☐ AR

☐ CR

☒ DC

☐ EP

☐ FS

☐ IM

☐ MO

☐ PD

☐ RPT

☐ SRN

☐ TD

☐ TQ

☐ UNGS

☐ 114

☐ GENERIC

**All/None**

☐ CR.CRMEXP

☐ CR.CRMTRAIN

☐ CR.CRMCOMP

☐ CR.LD

**DC - All/None**

☐ DC.COCMP

☐ DC.CO

☐ DC.WELDINSR

☐ DC.WELDPROCEDURE

☐ DC.DP

☐ DC.DPCCMP

☐ DC.DPCOPP

☐ DC.DPC

☐ DC.SA

Done

Cancel

103 Field - 85398 01/16/2023 01/19/2023  
(All Directives) All Groups 85398 (10) P R O +

19 WELDINSR on 88725 01/01/2023 01/04/2023  
(All Directives) DC (WELDINSR) (All Assets) (All Types) +

One way to isolate implementation activities is to filter out the questions intended for others.





**Presentation: Planning System Review, Q&A and wrap-up**

Notes:

## Lesson 5 Overview Tab

Now that we have completed the plan for our inspection, let's back up a moment and have a look at the overview of the inspection as it stands now.

The screenshot displays the 'Overview' tab of the PHMSA IA-Desktop application. The top navigation bar includes tabs for Overview, Planning, Inspection, Forms, Reports, Attachments, and Library. The 'Overview' tab is active, showing an 'Inspection Summary' section with a 'Click to edit' button and a 'Training workshop summary' text area. Below this is the 'Progress And Tasks' section, which is divided into two main areas. On the left, a 'Progress' sidebar shows a bar chart for 'Overall Inspection' (708) and 'Office' (591), with a 'More...' link for each. Below the chart, a list of 'Field' tasks is shown, including 'Field - 88723' (95), 'Field - 88725' (102), and 'Field - 85398' (103), each with a 'More...' link. At the bottom of the sidebar, 'WELDINSP on 88725' is listed with a 'More...' link. On the right, a 'Workflow tasks' section lists four tasks: 'Approve Setup/Pre-plan Analysis', 'Approve Inspection Plan', 'Supervisor Approval of Inspection Result...', and 'Finalize Inspection'. Each task has a 'Request' button. A green 'Create Task' button is located below the task list. A red arrow points from the 'Create Task' button to the 'Workflow tasks' list, and another red arrow points from the 'Progress' sidebar to the 'Progress against plan' text.

The inspection overview tab provides a summary of progress against the plan and tasks. At this point, we see a plan with no progress and no assigned tasks. Since we are done with planning, let's request approval.

## Lesson 5 IA Workflow



### Step 5.1: IA Workflow: Assigning tasks

On the main Overview tab, IA provides a workflow system that allows team members to assign tasks (to themselves or others) and to track the completion of those tasks. In addition to the four required tasks, the workflow system allows teams to create ad-hoc tasks and track their completion.

For GT and HL, IA has four built-in tasks, standard for all federal inspections. For other system types (GD, LNG) there are three default tasks. Teams may also create and assign ad-hoc tasks via the Create Task button.

All Tasks ▼	
Approve Setup/Pre-plan Analysis ?	Request ▼
Approve Inspection Plan ?	Request ▼
Supervisor Approval of Inspection Result..?	Request ▼
Finalize Inspection ?	Request ▼

Create Task

v2.0.0

The workflow system helps teams track what phase an inspection is in and who has responsibility for the next step(s).

Since we are done with Inspection Planning, let's request approval for our plan.

**Tip:** Before we request approval of our first two steps, it would be wise to first run a Validation report to see if our inspection violates any business rules. The validation report will find potential issues in your inspection and provide you with links to the places where you can fix them. Over the course of an inspection the Validation report will be run numerous times. Note that it is not always possible to clear all the validation issues immediately, but all should be cleared by the end of the inspection.

DEMO Training Workshop - D... - 2022 ▼ Office ▼ TRAINING SERVER - for training only

Home Settings Overview Planning Inspection Forms **Reports** Attachments Library

**Local Reports**

- [Export Questions](#)  
*List planned questions, or all questions in modules that include planned questions, for the current inspection/activity.*
- [Inspection Search](#)  
*Search the current inspection (question set PRS version GT.2022.04) for any word or phrase.*
- [Coverage Heatmap](#)  
*View and navigate all results from this inspection and linked relevant inspections. Also locate conditions such as missed follow-up, old results, or uncovered content areas that may indicate the need for additional attention.*

**Validation Report**

- [Inspection Validation](#)  
*Lists any inspection aspects not complying with required business rules*

**Results Reports**

- [Inspection Results \(IRR\)](#)  
*Provides tabular listing of results across entire inspection*
- [Results and Notes Review](#)  
*All results and notes presented for review in document format*

Requesting approval is accomplished by selecting an approver from the list of team members.

Approve Setup/Pre-plan Analysis ?

**Approve Inspection Plan ?**

Supervisor Approval of Inspection Result... ?

Finalize Inspection ?

Create Task

Request ▼

Request ▼

Julie (Lead)

David (Director)

Other...

Note: Inspection Plans and Results Approval can be done by either Supervisors or Directors, but only the person in the Director's role can approve the Finalize Inspection step, so if you can just have one other team member, give them the director's role.

**Tip:** To understand which team members can request and approve each workflow task, you can visit the configuration (⚙️) tab and then the Team tab. There you may view a chart outlining this information:

Note: roles in IA do not necessarily have to align with a person's overall position/job title. See below for more information:

Role	Inspection Access	Can request these workflow tasks	Can approve or reject these workflow tasks
Assignee	Can view, but cannot modify any records in the inspection.	Can only create <i>custom</i> tasks	Only <i>custom</i> tasks to which they've been assigned
Observer	Can view, but cannot modify any records in the inspection apart from their own inspector notes.	None	None
Inspector	Can view and modify records in the inspection.	None	None
Lead	Can view and modify records in the inspection.	<ul style="list-style-type: none"> <li>Approve Setup/Pre-plan Analysis</li> <li>Approve Inspection Plan</li> <li>Supervisor Approval of Inspection Results</li> </ul>	None
Supervisor	Can view and modify records in the inspection. When the "Supervisor Approval of Inspection Results" task is pending, can create and modify "Final Results".	Finalize Inspection	<ul style="list-style-type: none"> <li>Approve Setup/Pre-plan Analysis</li> <li>Approve Inspection Plan</li> <li>Supervisor Approval of Inspection Results</li> </ul>
Director	Can view and modify records in the inspection. When the "Finalize Inspection" task is pending, can create and modify "Final Results" and "Regulatory Actions".	Finalize Inspection	<ul style="list-style-type: none"> <li>Approve Setup/Pre-plan Analysis</li> <li>Approve Inspection Plan</li> <li>Supervisor Approval of Inspection Results</li> <li>Finalize Inspection</li> </ul>



## Step 5.2: IA Workflow: Completing tasks

Go to your Home tab and look for pending tasks from your group's inspections. You may not see any if you do not occupy the supervisor or director role on any inspections.

Home Overview Planning Inspection Forms Reports Attachments Library Help/Tools

All Years All Organizations All SysTypes All Available

Search Inspections

Showing 43 of 43

2022 GT Training Workshop - David King (DEMO)

PACIFIC GAS & ELECTRIC CO (15007)

1 Assigned Actions/Tasks

Approve Inspection Plan (DEMO)

Initiated by last modified a year ago

0 snoozed tasks show

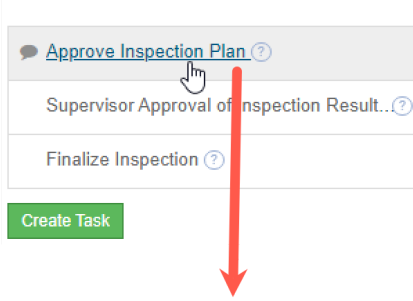
Requested Nov 2 Workshop

Tasks assigned to you will appear here. You can click on them to open the inspection and complete the task

To complete any tasks assigned to you, do the following. If you don't have a task assigned, don't worry; you will in the next step.

1. Click on the task in the Assigned Actions/Tasks (this will open the corresponding inspection).
2. Review the task(s) assigned to you and accept or reject them as appropriate.

Commenting on tasks: It is also possible to leave a comment without actually approving or returning a task. To do this, drill down into the task by clicking the link on the task's title.



Approve Inspection Plan ?

Supervisor Approval of Inspection Result...?

Finalize Inspection ?

Create Task

◀ Back to Tasks

### Approve Inspection Plan

Supervisory approval of inspection plan

Status: Requested

Assigned to: David King

Leave a comment...

Add Comment

Approve Forward Return

**At this point in the workshop, please do not request Supervisor Approval of Inspection Results or Finalize Inspection tasks. Doing so will prevent your team from being able to add and edit results in later lessons. If you have already requested one of these tasks, don't worry; see the next paragraph for instructions on undoing a task request and/or approval.**

In some cases these workflow tasks may need to be reversed/unapproved. For example, if the Supervisor has already approved the Supervisor Approval of Inspection Results task, but an inspector needs to modify a result note, the approval of this task will need to be undone. This can be achieved by the following steps:

1. The Supervisor can Unapprove the task.
2. The person who originally requested the task can un-request it.
3. From there, changes to the inspection can be made.
4. Once appropriate changes have been made, the task should be re-requested.



## Step 5.3: IA Workflow: Custom Tasks

For custom tasks, IA supports two workflow types: Basic and Approval. Basic tasks are simple assign-start-finish tasks, while the Approval tasks follow a Request – Forward/Accept/Return cycle. Try both to become familiar with the differences.

### Workflow Type

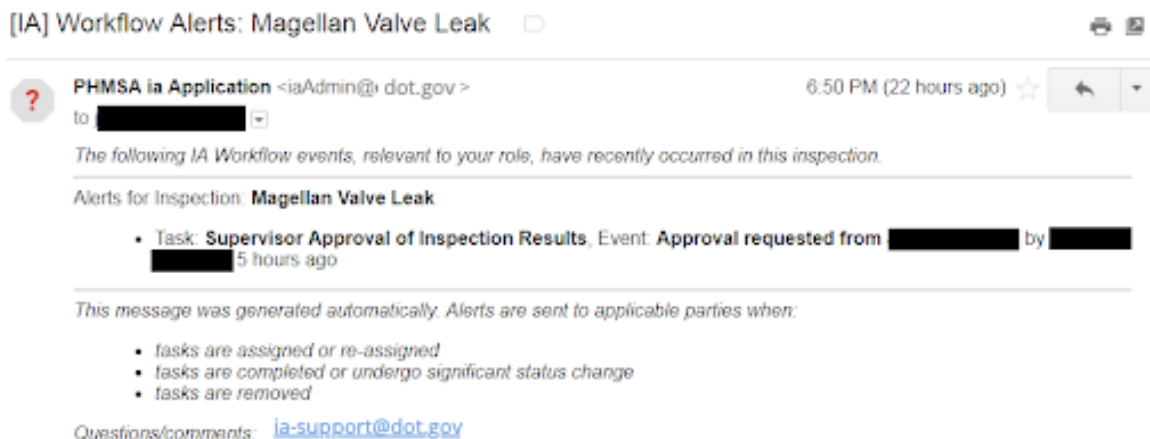
Basic Task (Assign - Start/Finish) ▼

- ☒ Basic Task (Assign - Start/Finish)
- ☐ Approval (Request - Forward/Accept/Return)

Work as a team and perform the following steps:

1. Have each team member create a task (using the Create Task button) and assign it to another team member. Make sure everyone gets at least one task assigned to them.
2. If everyone is connected to the internet, you should see your tasks appear on the task list.
3. You can also see your assigned tasks on the **Home tab**.
4. Find a task assigned to you by a group member and add a comment to it (see step 5.2 above for instructions on how to do this).
5. Assign an approval-type task to yourself and then forward it to a team member. Note: Basic tasks cannot be forwarded, only Approval tasks.
6. Take a trip to the Home tab and see all your pending tasks (across all inspections) listed in the right hand pane. Note that clicking on them opens the related inspection.
7. It's OK to assign custom tasks to yourself. Try it.

**Tip:** Tasks are synced in IA immediately, so you will become aware of task assignments and completions immediately. In addition, IA Workflow Alerts are sent out twice daily via email. See an email example below.



At this point your group should be familiar with the IA Workflow system.



*PAUSE here and wait for other groups to complete the step above. Here are some exercises to try while you wait.*

1. Now that your plan is approved, modify your plan and see what effect that has. Unless you are only adding a comment, you will be warned that your plan approval will be removed, requiring re-approval.
2. Go ahead and change the plan, and then request re-approval from a group member.
3. Have a group member assign you an approval task, reject it, and see what happens.
4. Add some comments to tasks.



#### Presentation: Question Data Structure

Notes:

## Lesson 6: Inspection Tab Operations



### Step 6.1: Inspection Tab Operations

Now that we've set up and planned our inspections, let's get ready to collect some results. Most of your inspection result collection will be done in the Inspection tab. Let's look at the layout and function of various controls on this tab.

1. Switch back to your personal inspection.
2. Select the Office activity from the activity selector in the header.

The screenshot shows the PHMSA IA-Desktop interface. At the top, there is a header bar with a "DEMO" button and the text "Training Workshop - D... - 2022". Below this is a navigation bar with tabs: "Overview", "Planning", "Inspection", and "For". The "Inspection" tab is currently selected. On the right side of the header bar, there is an "Office" dropdown menu. The dropdown menu is open, showing a list of activities: "Office", "Field - 88723", "Field - 88725", "Field - 85398", and "WELDINSP on 88725". A mouse cursor is pointing at the "Office" option in the dropdown menu. Below the navigation bar, the main content area displays "Inspection Summary" with fields for "start year" (2022), "lead" (David King), "regulator organization" (Califo), and a description "Provide executive summary of plan rationale, portions of system i". There is a "Click to edit." button below the description field.

3. Doing this will move you to the Inspection tab, where all the results are collected. It will also cause inspections planned for the Office visit to be displayed as planned.

Filters

Progress and navigation

Questions and results

4. Explore the question filters provided at the top of the question list.

See if you can get the following question sets displayed via the filters:

- The **planned** questions for the current activity for all groups with planned questions. (Hint: This should be easy; it's the default.)
- The questions in the FS.FG (Facilities and Storage/Facilities General) subgroup (**planned** and **unplanned** and **ALL**).
- All **planned** questions of type **procedure** or **records**
- The **planned** questions of type **observation**. (Hint: There will be zero of these in Office, per our implementation filters.)

- The **planned** questions in the **Time-Dependent Threats – External Corrosion – Coatings (TD.COAT)** subgroup.
5. Clicking the star next to a few questions will flag them as favorites. Once checked, you can use the favorites filter to isolate them. *Note: Favorites are local only to the machine you are working on. They are not synced to your team or other devices like your iPad.*

#### 4 Performance Metrics ★



- Find an excluded question. *Note: Excluded questions are unplanned, so you will have to change your plan filter to All and may need to select an unplanned group to see these.* It should look something like the example below.

**2 Breakout Tank Inspection** ☆

**R** Do records document that breakout tanks that are not steel atmospheric or low pressure tanks or HVL steel tanks built according to API 2510 have been inspected at the proper interval and that deficiencies found during inspections have been corrected? FS.TSAPIINSPECT.BOINSPECTION.R - 195.404(c)(3) © (195.432(a))

**Excluded Question Indicator** → This question is excluded for assets: **Unit 24755** as it has been identified as being exclusive to the following attributes: **Component: BOT/RT**

Considerations Attachments Inspector Notes Legacy Form

**Add a Result** ▼

Hint: Another way to find an excluded question is to return to the planning grid, expand it, and find a question that is planned for some assets but excluded for others. Then click the link for that question provided in the planning grid.

11. Do records indicate safety-related condition reports were filed as required? (191.20(a)) RPT.RR.OPCR.R

12. Does the process require reports to be submitted within 60 days after completing inspection of underwater pipelines in GOM and its inlets? (191.27(a)) RPT.RR.OPCR.P

13. Do records indicate reports were submitted within 60 days of completing inspections of underwater pipelines? (191.27(a)) RPT.RR.OPCR.R

14. Do the process require PHMSA notification when federal or state permits cannot be obtained in time? (192.605(b)(1)) RPT.RR.NOTIFYPERMITGOM.P

15. Do records indicate required notification was provided when permitting delayed reburial of pipe in Gulf of Mexico waters found to be a hazard to navigation? (192.612(c)(3)(ii)) RPT.F



## Step 6.2: Question Layout

In IA, each question is organized in a similar format. Let's look at the various components.

- The basic layout of each question in IA is as seen in the figure below.

**Assessment and Repair** ← **Group**

▼ **Repair Methods and Practices** ← **Subgroup**

**6** **TAPPING PIPELINES UNDER PRESSURE** ☆ ← **Title**

**P** Is the process adequate for tapping pipelines under pressure? AR.RMP.HOTTAP.P - 192.605(b)(1) (192.627) More...

**Considerations** **Attachments** **Inspector Notes** **Plan Notes (2)**

**Add a Result** ▼ **Unsat for All Assets**

**Type** **Result tab** **Detail tabs** **Question reference and guidance**

- There are also many glyphs that are displayed when certain conditions are true of the plans or results for a given question. The figure below shows the possible additional glyphs and their meanings.

The screenshot shows the 'In-Line Inspection (Smart Pigs)' record page. Annotations explain the following elements:

- WA UTC:** This question is specific to this regulator.
- Validation of ILI Results:** This question has one or more pending requested items.
- AR.IL.ILINVALIDATE.R - 195.452(l)(1)(ii):** One or more of the result records for this question are in conflict.
- Considerations:** This question has some, but not all of the planned results.
- Add a Result:** There are regulator-specific considerations for this question.
- Unsat for 12232, 39334:** This result has a validation issue.
- Past Results (6):** One of the past results is a Concern or an Unsat.

Let's explore the questions and related content.

3. Select a question and click on the **More...** link to see available reference materials. Explore the reference materials for that question.

## Assessment and Repair

## ▼ Repair Methods and Practices

**1** SAFETY WHILE MAKING REPAIRS ☆

**P** Does the process ensure that repairs are made in a safe manner and are made so as to prevent damage to persons and property? AR.RMP.SAFETY.P - 192.605(b)(9) (192.713(b)) More...

References

Primary Federal Reference  
192.605(b)(9)

Secondary Federal Reference(s)  
192.713(b)

Enforcement Guidance  
O&M 192.605(b)  
O&M 192.713

FAQ  
GASBATCH1: 1 General - Rule Implementation Dates  
GTIMP: 70 Remediation  
GTIMP: 225 Remediation

on where gas presents a hazard of fire or explosion?  
1(b), 192.751(c)) More...

Notes (2)

4. Read the **considerations** for several questions.
5. Find a question with Past Results and read them. (Hint: Have a look in the AR.PTI subgroup. These are results from inspections you have checked as Relevant Inspections in your inspection configuration (see Lesson 2 above).
6. Some questions are repeated (displayed in more than one subgroup context). For example, see TD.CP.RECORDS.P. Repeated questions are indicated via a counter link which allows quick navigation to the other locations.

20

CORROSION CONTROL RECORDS ☆

P

Does the process include records requirements for the corrosion control activities listed in 192.491? TD.CP.RECORDS.P - 192.605(b)(2) (192.491(a), 192.491(b), 192.491(c)) More...

Considerations

Attachments

Inspector Notes

Legacy Form

Plan Notes (2)

Add a Result ▾

21

CORROSION CONTROL RECORDS ☆

R

Do records indicate the location of all items listed in 192.491(a)? TD.CP.RECORDS.R - 192.491(a) More...

Considerations

Attachments

Inspector Notes

Legacy Form

Plan Notes (2)

Add a Result ▾

Repeated Question (2)

Repeated Question

This question is presented in multiple places. Results collected for this question are available for review at these locations.

1. TD.CP #14



2. TD.CP.MONITOR #20

3. TD.CP.EXPOSED #5

- Use the search tool to locate questions that reference a certain word, phrase or code section.

Presentation View: INTEGRATED ▾

All Types ▾ ☆ ▾

192.491  

Office

	P	R	O	
Planned	291	251	0	542
Done	12	8	0	20
Pending	3	0	0	3
Missing	276	243	0	519

1 Requested Item(s) not yet received

Recent Questions

AR.RMP.SAFETY.P  
Sat- 88723, 88725, 8539...

For user support options see the [Help/Tools](#) tab.

**Tip:** The search tool will search the entire inspection, including question content and user-entered results.

### Step 6.3: Question change tracking

Looking through the Inspection tab, you might see additional, blue icons to the left of some questions. These icons denote that a question was added or updated in a previous PRS/question set. A plus icon signifies it was added as a new question, and an arrow icon signifies it was updated in some way.

- Find a question that has one of these icons (this can also be done on the Planning tab - click Expand All Subgroups and quickly scroll through the subgroups to identify those with change icons). Click the icon.

### CRM, SCADA, and Leak Detection (CR)

General (CR.CRMGEN)

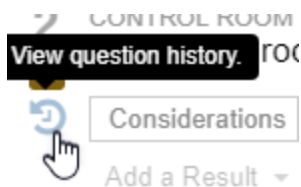
- Do procedures adequately address the pr
- Are CRM procedures formalized and c

Page 42 | 83

2. Clicking this icon will open a Question Comparison window, where you may view how this question has changed over time. Text that has been removed is struck through in red, while text that has been added is green:

Current	Question Comparison
<b>GD.2021.02</b> v19.0.1 Released 2021-06-21	<b>REPAIR OF CORRODED PIPE</b> Does the process give sufficient guidance for personnel to repair or replace pipe that has corroded to an extent that there is no longer sufficient remaining strength in the pipe wall? AR.RCOM.REPAIR.P - 192.605(b)(2) ( 192.485(a); <del>192.485(b);192.487(a);192.487(b);192.489(a);192.489(b);192.491(c)</del> )
<b>History</b> <b>GD.2020.01</b> v12.0.0 Released 2019-12-17	1. General corrosion [transmission per lines], procedures should require: <del>a. 192.487. Replace pipe that is found so generally corroded that the remaining wall thickness is less than that required for the maximum allowable operating pressure of the pipeline. OR</del> <del>b. Reduce the maximum allowable operating pressure commensurate with the strength of the pipe needed for serviceability based on actual remaining wall thickness. OR</del> <del>c. Localized corrosion pitting [transmission lines], procedures should require:</del> 2. Localized corrosion pitting [transmission lines], procedures should require: <del>a. Replace or repair pipe that has localized corrosion pitting to a degree that leakage might result, unless the operator reduces the maximum allowable operating pressure commensurate with the strength of the pipe based on actual remaining wall thickness in the pits.</del> 3. (GD) General corrosion [distribution lines], procedures should require: a. (GD) <del>strong</del> Except for cast iron or ductile iron pipe <del>strong</del> , each segment of generally corroded distribution line pipe with a remaining wall thickness less than that required for the MAOP of the pipeline, or a remaining wall thickness less than 30 percent of the nominal wall thickness, must be replaced. However, corroded pipe may be repaired by a method that reliable engineering tests and analyses show can permanently restore the serviceability of the pipe. Corrosion pitting so closely grouped as to affect the overall strength of the pipe is considered general corrosion for the purpose of this paragraph. b. (GD) <del>strong</del> Except for cast iron or ductile iron pipe <del>strong</del> , each segment of distribution line pipe with localized corrosion pitting to a degree where leakage might result must be replaced or repaired. c. (GD) <del>strong</del> Cast iron or ductile iron <del>strong</del> , Each segment of cast iron or ductile iron pipe on which general graphitization is found to a degree where a fracture or any leakage might result, must be replaced. 2. (Graphitization [per 192.489 Localized for distribution lines], procedures should require: a. Each segment of cast iron or ductile iron pipe on which general graphitization is found to a degree where a fracture or any leakage might result, must be replaced. b. Each segment of cast iron or ductile iron pipe on which localized graphitization is found to a degree where any leakage might result, must be replaced or repaired, or sealed by internal sealing methods adequate to prevent or arrest any leakage.
<b>GD.2019.01</b> v10.0.0 Released 2019-03-31	
<b>GD.2015.01</b> v3.0.0 Released 2015-02-01	
<b>GD.2014.01</b> v2.0.0 Released 2014-01-01	
<b>GD.2013.02</b> v1.1.0 Released 2013-06-01	
	<b>Additional Information</b> Comparing updates to AR.RCOM.REPAIR.P in GD.2021.02 (v19.0.1). Found historical question in GD.2020.01 (v12.1.0).
	<b>Editor's Change Notes</b> GD.2021.02 — v19.0.0: Removed code reference to 192.485 and considerations #1 and #2.

3. Additionally, you may view the history of any question, even if it has not been modified recently. Hover over a question on the Inspection tab and you'll see a small blue clock icon appear. Click it to view the question's history.



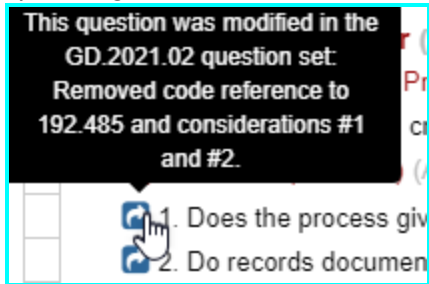
Note: You can select which of these new/updated icons you'd like to see (all, none, new only, etc.) by visiting the Help/Tools tab and then clicking Options. Your selection here will persist across inspections.

#### Display Question Change Tracking Icons:

All

☒ All  
☐ None  
☐ New only  
☐ Updated only  
☐ Annotated with question editor's change note only

**Tip:** If these icons are filled/solid, it means the change is substantive and the content team and/or question editor has added a specific note regarding this change. You can hover over the icon with the mouse to see this “editor’s change note” as well as view it in the Question Comparison window by clicking the icon.

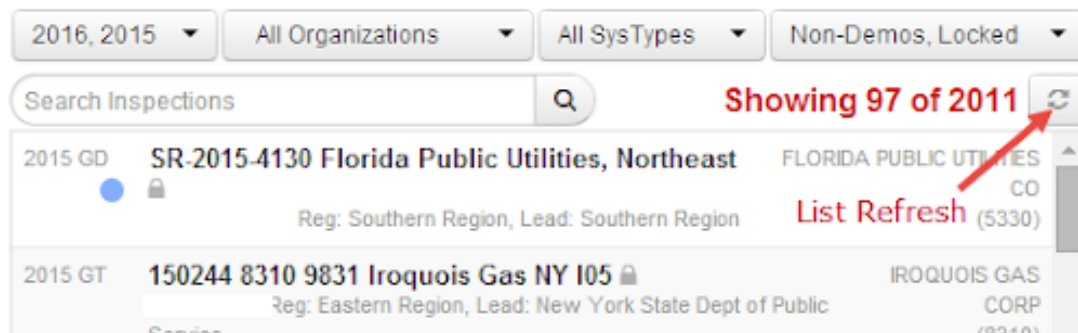


### Step 6.4: Join your team on a single inspection

At this point we will switch your group to working on a single inspection together. **Select one member’s inspection as your shared inspection, and make sure each person in your group is added to the team for that inspection.** Then all other group members should find it on their home tab and open that inspection.

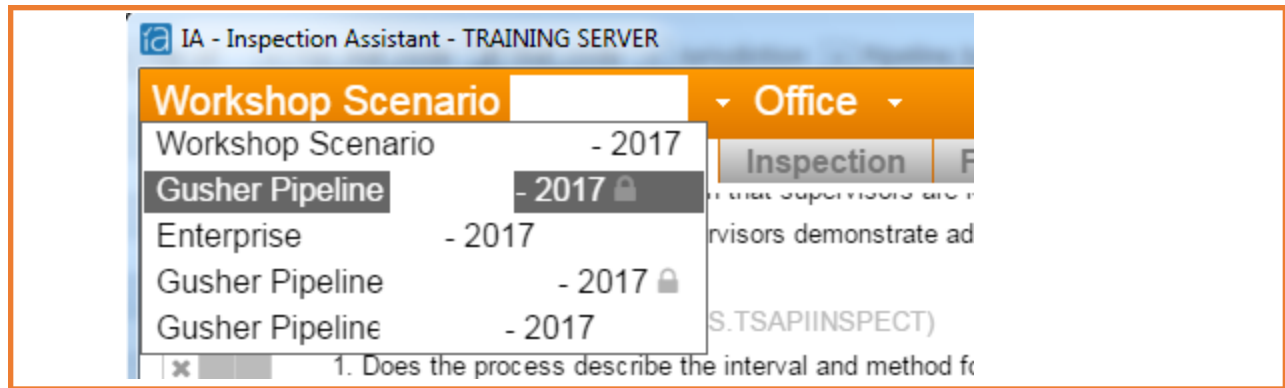
- a) Find and load the target inspection from the Home tab list. You may need to refresh the list and/or adjust the filters to find it.

**Tip:** If you have been recently added to an inspection, you may not see it in your Home tab inspection list. To be sure you are looking at all inspections you have access to, click the refresh button at the top of the inspection list.



From this point forward, the instructions assume your group is looking at the same inspection. It’s fine to switch back to your own inspection later if you want to try some explorations on your own; just remember to switch back to your group’s selected inspection before proceeding with the next steps.

**Tip:** Remember that you can use the recently-used-selector to quickly switch between recently loaded inspections.

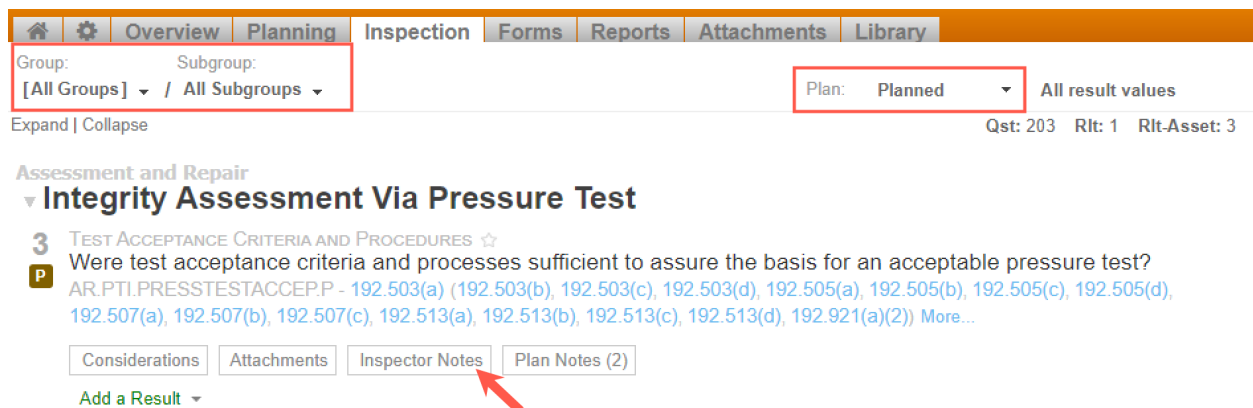


## Lesson 7: Inspection Tab Operations

### Step 7.1: Creating and finding Inspector's Notes

Each inspector can record his or her own temporary scratch notes for any question. Each team member can see the other's notes but cannot edit them. Inspector's notes are a good place to work if you have multiple team members working on the same questions at the same time as there will be no conflicts between them. If you attempt to work directly in the results records for the same questions at the same time you are more likely to create conflicts that will have to be resolved manually (we will do this purposely shortly).

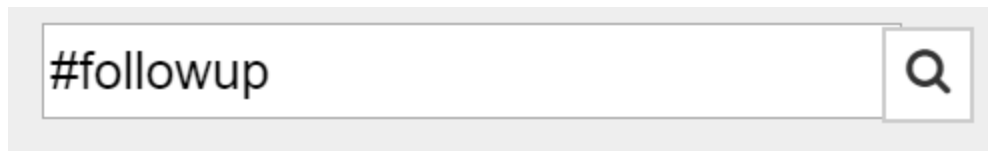
1. Select a question with your group to work with, each person should get that question open in their IA Inspection tabs.
2. Click the Inspector Notes tab and add a note. Each team member should do this.



3. Wait for the other team members' notes to sync and view them.
4. Each question accommodates an inspection note for each implementation activity. Create notes for additional activities and view other activity-specific member notes.

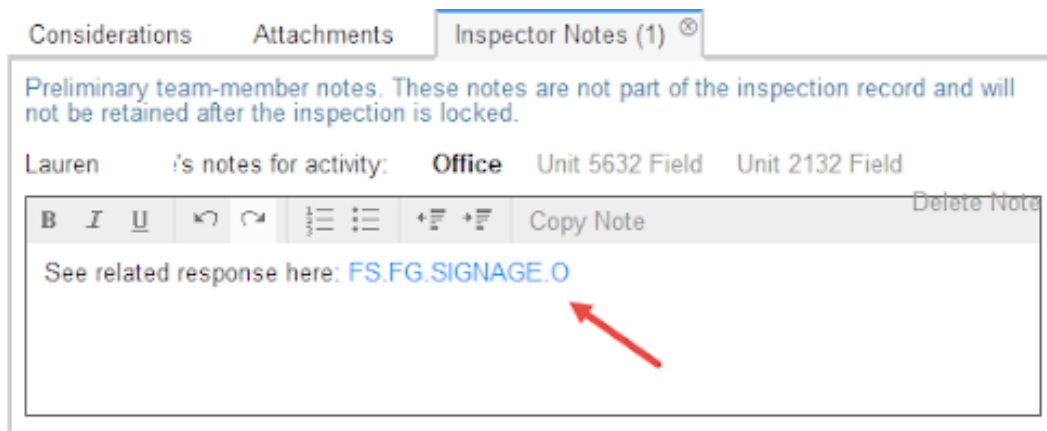
**Important:** *Inspector's notes are temporary 'scratch' notes. They are not part of the inspection record. They will be automatically removed when the inspection is locked, so it is important to record the final documentation in result records, not inspector's notes.*

5. Inspector's notes and result text can be searched along with all other content. You can use this feature to tag things you want to find later. For example, add "#followup" to one of your inspector's notes. And then search for that "#followup" using the search text box in the sidebar. In this way you can easily locate things you wish to revisit.

A search bar with the text "#followup" entered. To the right of the text is a magnifying glass icon inside a square button.

**Important:** *At this time, only inspector's notes and results are searched in the search report. Attachments, requested items, planning notes, etc. are not part of the search set.*

**Tip:** *In most text fields in IA, if you enter a question's ID, it will be converted to a link that can be used to navigate to that question quickly later.*

A screenshot of the "Inspector Notes" tab in a software interface. The tab is labeled "Inspector Notes (1)" with a close icon. Below the tab, there is a text area containing the text "Preliminary team-member notes. These notes are not part of the inspection record and will not be retained after the inspection is locked." Below this, there is a line of text: "Lauren's notes for activity: Office Unit 5632 Field Unit 2132 Field". Below this line is a rich text editor toolbar with buttons for Bold (B), Italic (I), Underline (U), Undo, Redo, Bulleted List, Numbered List, Indent Left, Indent Right, Copy Note, and Delete Note. The text area below the toolbar contains the text "See related response here: FS.FG.SIGNAGE.O". A red arrow points to the text "FS.FG.SIGNAGE.O".

**II** *PAUSE here for other groups to finish the steps above. In the meantime, here are some extension exercises to perform.*

1. Try the Recent Questions links on the sidebar and see how they work.
2. Use the Search report to locate questions that reference the Abnormal Operations. (Hint:.402 (Liquid) or .605 (Gas Transport) or .631(g))
3. You can also control how IA acts when results are created. Go to the Help/Tools tab and click the Options link in the sidebar. Check (or uncheck) the "Always expand results on create" option and experiment with the difference when creating SAT results.



**Presentation: Result value types and structures**

Notes:



For the next step, we will **switch back to working on individual inspections**. To do this, return to the Home tab, locate the inspection with your name on it and load it. Alternatively, you can use the header menu to select your inspection from the list there.



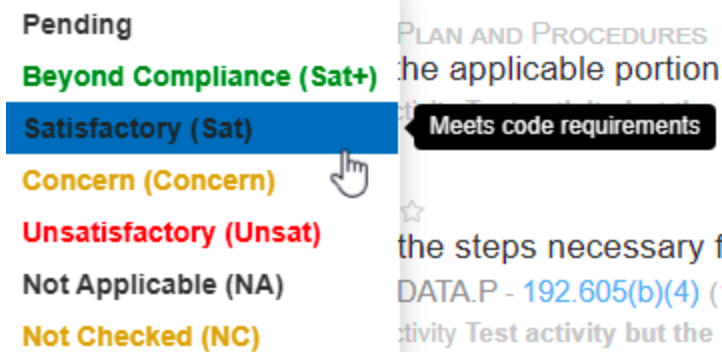
## Lesson 8: Creating Results, tracking progress



### Step 8.1: Creating Results

In your own inspection, select a series of planned questions and record the following results.

1. Record a result of type PENDING, SAT+, SAT, CONCERN, UNSAT, NC and NA respectively. Note the requirements are not the same for each. If you are in need of a refresher on what each result means, you can hover over it in the list to see a brief definition.



2. Note that your results are each assigned to specific assets and *the assets planned for the current activity are shown in bold and selected by default.*



## Assessment and Repair

## ▼ Integrity Assessment Via Pressure Test

4 PRESSURE TEST RESULTS ☆ R+ !

Do the test records validate the pressure test? AR.PTI.PRESSTE  
 192.513(a), 192.513(b), 192.513(c), 192.513(d), 192.517(b), 192.617, 192

Considerations Attachments Inspector Notes Plan Notes (1)

Add a Result ▼

⚠ Sat for No Assets

Sat ▼ for 88725 (430030... ▼

Text entered All/None

Result Note

Click to edit

- ☐ 88723 (55600001) - Pleasant Creek ⓘ
- ☒ **88725 (43003001) - Los Medanos** ⓘ
- ☐ 85398 (10) - Sonoma Division ⓘ

*The assets planned for the current activity are selected by default and are shown in bold.*

**Important:** The bold assets are in the plan for the current activity, this does not necessarily mean that the question is not planned for other assets in other activities.

3. Add at least one Standard Issue to the Unsat result you have created.
4. Record a result for an **unplanned** question.
5. Observe how your sidebar progress matrix changes in response to result creation for planned question/asset pairs.
6. Two areas of common confusion in first-time IA users is the following: The difference between a question and a result, and the difference between an asset and an activity. Think back over what you've done so far in this workshop. Do you know the differences? If not, ask your group members and/or an instructor. It's important to have these concepts clearly understood.
7. Finally, IA typically disallows the collection of multiple results for the same question/asset pair. Go ahead and assign a result to all assets. Then try to create a new result for that same question. You should see the Add a Result link disabled like in the figure below.

53 INTERNAL CORROSION CONTROL: DESIGN AND CONSTRUCTION (192.476) ☆ R+ ⓘ  
 Do records demonstrate the transmission line project has features incorporated into its  
 of 192.476? DC DPC INTCORRODE.R - 192.476(d) (192.476(b), 192.476(c), 192.476(a)) More...

There are already results for all available assets.

Comments Inspector Notes Plan Notes (1)

Add a Result Pending for 88725 (43003001) Unsat for 88723 (55600001) Sat for 85398 (10)

Add a Result link is disabled if there is already a result for all available assets

- You can also add a result for unplanned questions. Simply hover over the question and click Expand to add a result:

CONTROL ROOM MANAGEMENT CRITERIA ☆ R+ ⓘ  
 Do procedures adequately address the process and criteria to  
 This question is not planned for activity Field. **Expand** to provide a result anyway

**Tip:** The PENDING result value exists to allow you to start a result without having to commit to a (Sat/Unsat) value. Later on, it is easy to return to these pending results, finalize the result findings and select a value. PENDING results are not considered “done” in progress monitoring.

*It is a good idea to use PENDING for any result you expect to be developed over multiple visits and in different contexts. Otherwise, it might be missed in subsequent interactions with the operator.*

Note that while the “Supervisory Approval of Inspection Results” and the “Finalize Inspection” workflow tasks are pending (when either of those tasks have been requested but not yet approved), the Supervisor and Director may create a Final Result that differs from the result that the inspectors recorded. This Final Result will override the team result in data exports and downstream reporting. Both results will be stored with the inspection and will be available to specialized reports such as the coverage heatmap.

#### Note fields related to questions and results:

**Inspector Notes:** Information entered into this box will be purged after the inspection is locked. These notes are temporary in nature and are not part of the inspection record.

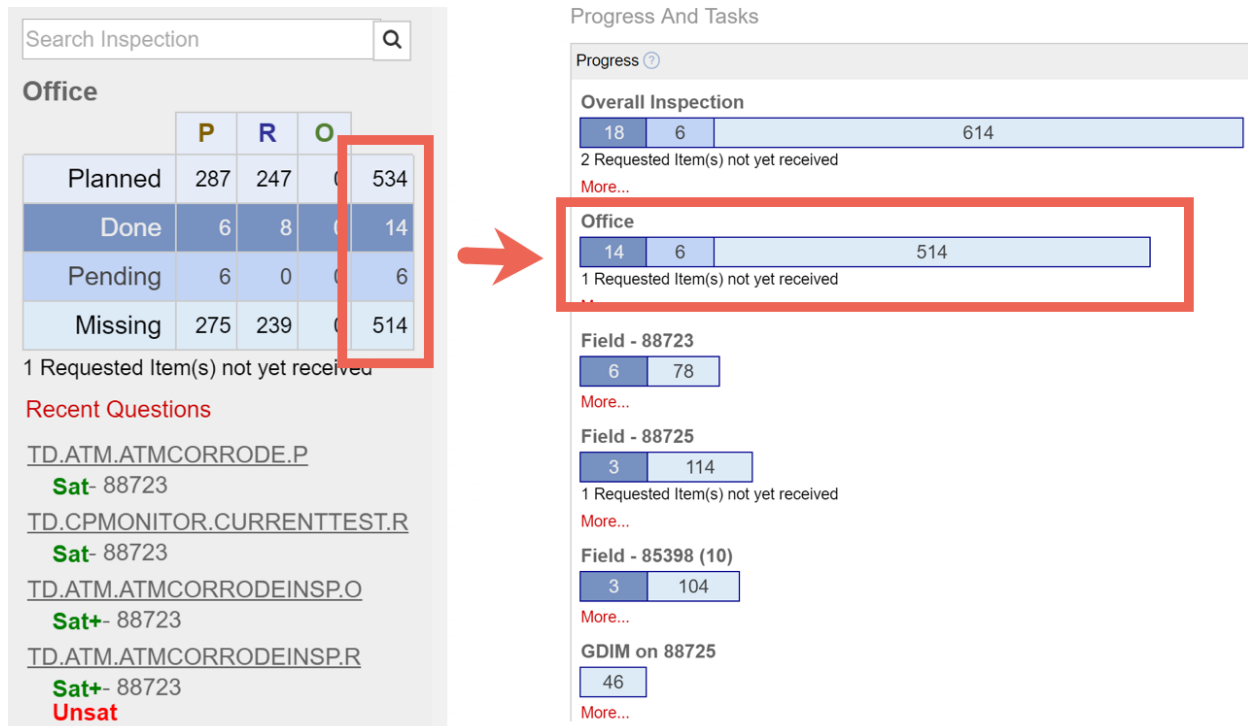
**Result Notes:** Information added here is part of the permanent inspection record. These should be detailed enough to describe what was reviewed, operator responses, and discussion summaries.

**Result Summary/Result Issue Summary:** Also part of the permanent inspection record. When the question has an Unsat or Concern result, this field must be filled out as well. It is a shorter summary of the specific issue(s) found. Often this field will contain draft language to be used in future enforcement communications.

## Step 8.2: Tracking Progress

The progress matrix in the Inspection Tab's sidebar is a valuable guide to your progress in completing the set of questions designated to the current activity.

For each question type, the grid shows the total Done, Pending, and Missing asset-specific results. The counts in each cell represent the number of question-asset pairs that exist in each condition.



The right-hand totals on the progress matrix correspond to the activities progress bar on the overview tab.

### ▼ Integrity Assessment Via Pressure Test

1 TEST ACCEPTANCE CRITERIA AND PROCEDURES ★

**P** Were test acceptance criteria and procedures/processes sufficient to assure the basis for an acceptable pressure test? [AR.PTI.PRESSTESTACCEP.P - 192.503\(a\)](#) ([192.503\(b\)](#), [192.503\(c\)](#), [192.503\(d\)](#), [192.505\(a\)](#), [192.505\(b\)](#), [192.505\(c\)](#), [192.505\(d\)](#), [192.505\(e\)](#), [192.507\(a\)](#), [192.507\(b\)](#), [192.507\(c\)](#), [192.513\(a\)](#), [192.513\(b\)](#), [192.513\(c\)](#), [192.513\(d\)](#)) [More...](#)

Considerations Attachments Inspector Notes Legacy Form Past Results ( 1,1y )

Plan Notes (1)

Add a Result ▼ **Pending for All Assets**

**Office**

	P	R	O	
Planned	291	251	0	542
Done	9	8	0	17
Pending	3	0	0	3
Missing	279	243	0	522

1 Requested Item(s) not yet received

**Recent Questions**

In this example, the 3 in Pending [P]rocedure questions corresponds to a single result in which all three assets are selected.

You can use the matrix links to quickly find questions that need attention and also to be aware of what types of questions need attention. For example, if you are thinking about going inside to review

procedures, you might want to: a) confirm there are no remaining [O]bservation questions requiring results and that there are, in fact, remaining [P]rocedure questions that are Missing or Pending.

You can see here how leaving results as Pending is important if you expect to revisit them. Doing so will ensure they stay out of the Done row and in view for all inspection teams.

Each cell in the progress matrix is also a link that will modify the inspection tab's filters to display the corresponding set of questions and results. The same is true for the segments of the activity-specific progress bars. Try clicking these links to see how they affect the Inspection tab filters.

Finally, create a few more results and see how the result value (Pending or other) and the selected assets affect the way the numbers in the progress matrix and progress bars change.

**II** *PAUSE here for your group to complete the result exercises above and then switch back to working on a single inspection together.*



## Lesson 9: Creating and resolving conflicts

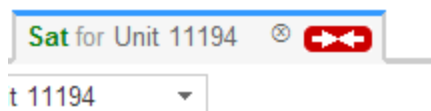
### Step 9.1: Resolving Conflicts



When working together as a team on a single inspection, it is possible to get into situations where users edit the same result (or other entity) at the same time and the system needs human intervention to resolve the conflict. In this step, we will purposely create conflicts and then resolve them. It is important to be working together on the same inspection for this next section.

**Important:** All group members will need to have an active internet connection for these next steps.

1. In pairs (or group of 3 if needed), select a specific question with a result and open it on your respective computers. *Note that these next steps need to be followed with the same result on both computers, not two separate results. If you need to create a result first, have one person do that and let it sync to both computers. Then continue with editing that result.*
2. Together, make a small, unique change to the results notes (e.g., write your name).
3. Together, as a group, collapse the result (close the tab) or otherwise move off the text area to cause the changes to sync.
4. One or more of your group should see a conflict icon appear on the result.



Click the icon (or the button on the alert box that also appears) and resolve the conflict by selecting one of the options.

	Local		Server
	<input checked="" type="button" value="Keep Local (Sally Tester's)"/>		<input type="button" value="Keep Server [ ]'s)"/>
Version	4.1		5
Node	AR.IL.ASSESSSCHEDULE.R		AR.IL.ASSESSSCHEDULE.R
Value	Sat		Sat
Notes	This is a conflict test. I wrote this. st		This is a conflict test. I wrote this. lc
Summary			
Assets	BAYTOWN CRUDE SYSTEM		BAYTOWN CRUDE SYSTEM

5. It's very important to understand what happens when you have a conflicted record:
  - a. The conflict will keep your changes from being recorded by the server and seen by others.

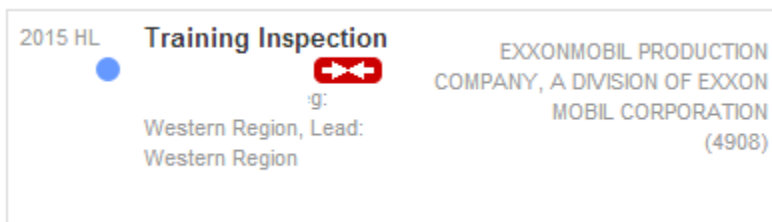
- b. You can resolve the conflict (in fact you must in order to be able to participate in future revisions of the conflicted record), but take care when doing so. Select the record version with the most value. In some cases, you may wish to copy/paste text out of the record you are rejecting prior to resolution. This way, you can return to that result and paste in the text you wished to preserve.
6. Attempt to create and resolve conflicts until your entire team has seen and resolved at least one conflict on their own machine.
7. Conflicts are very rare when all members have connections and take basic precautions (see below) to avoid double entries. However, they can occur more easily when a team member is disconnected. In that case, the probability of un-synced changes on the disconnected machine conflicting with changes made by others increases.



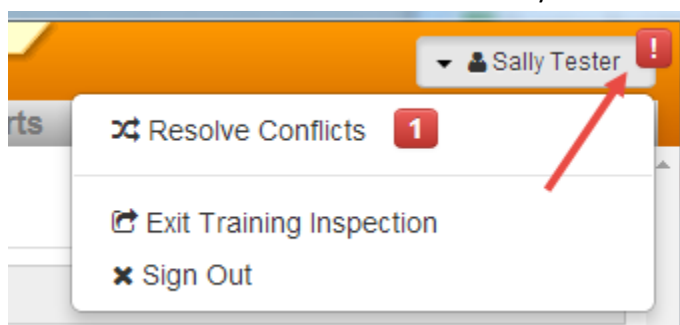
*PAUSE here for all groups to complete the conflict exercises. Here are some exercises to try while you wait.*



1. Disconnect one team member (press F6 to do this). Change the same results on both the connected machine(s) and the disconnected one.
2. Then, restore the connection on the disconnected team member's computer (press F6 again to do this).
3. Resolve the conflicts.
4. Repeat the steps above, but before reconnecting, close IA on the disconnected machine. Then restart IA and notice the conflict warnings in the home tab inspection list. When you see this, it is important to re-open the inspection and resolve those conflicts. Otherwise, your changes will never be synced, and you will also not get the latest changes for the conflicted records from your team members.



5. Finally, conflicts are also notified in the upper right-hand side of the IA window. You can click on the user button and resolve them. Try it.



6. Think about and discuss everyday scenarios that could increase the potential for data conflicts and what steps you can take to eliminate and/or mitigate them.

### **Summary**

1. Avoid conflicts by designating a scribe (who alone does results entry) and/or using inspector-specific notes to capture findings which are later used to create the final result.
2. Re-connect your device and re-open your inspection as soon as possible if you have collected results while disconnected.
3. If you see conflict warnings, deal with them right away. They won't go away by themselves and the longer you wait, the greater the chance your input will not be useful in the development of results.




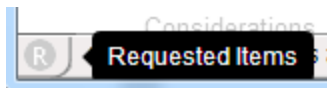
## Lesson 10: Attachments

In addition to results, IA can also collect, link, and track other entities, collectively called Attachments. At present there are eight different types of attachments, let's look at a few of them.

### Step 10.1: Requested Items

During an audit, there are often documents requested that are not available at the time they are requested. IA provides a means to track these requests, link them to relevant questions, and confirm when they have been received and reviewed.

1. Requested items can be linked to any question, or to multiple questions. The simplest thing is to click the  glyph that appears when you hover over a question.
2. Click the "add requested item" link to add the item (note how the question ID of the selected question is automatically provided.)
3. Add a description, notes, but leave date received blank.
4. Note the "R" glyph that now appears next to the question, indicating there is a requested item pending for this question.
5. You can Click the R to open the requested item list with that item highlighted, from there you can receive it (which will stamp the current date on the record), or click 'edit' to make further edits to the item.
6. You can also click the R tab in the lower left to see a list of requested items



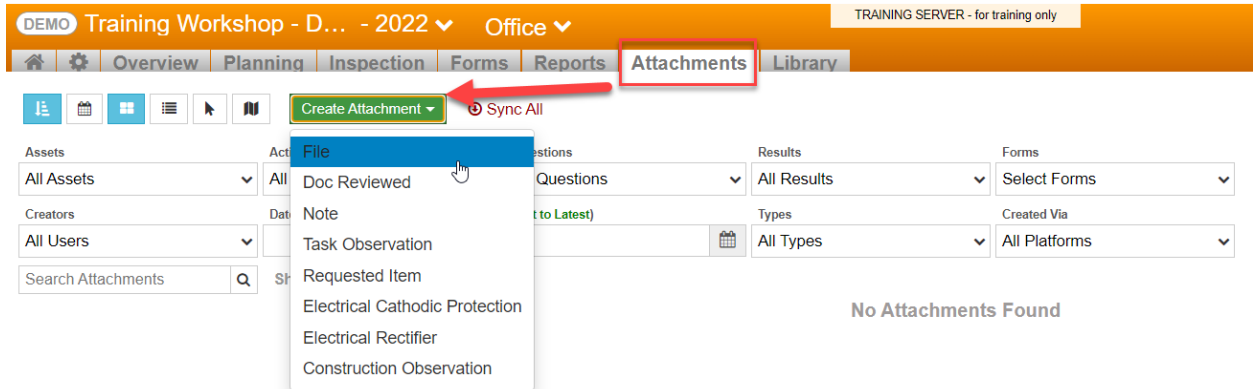
7. Add several more requested items for different questions.
8. Finally, there is a requested item report that we will look at later.

### Step 10.2: File Attachments

A requested item (above) is a specific example of a more general "file" attachment. The basic file attachment does not have the additional fields needed to track requested items. Files can be photos, pdfs, Word documents, and other sorts of files that may be generated during an inspection. Let's create a file attachment.

1. Locate a suitable file (you may have been provided a sample file to work with)
2. Open the Attachments Tab, click the Create Attachment button and select "File" type.





3. Select or drag-and-drop a file (photo, pdf etc) into the File Attachment. If you wish, you can add multiple files.

Attachment Details Done Cancel

---

**Basic info**

Title:

Links:

Questions:  Results:  Assets:  Activities:  Forms:


Notes

Attachment notes...

---

**Files** Attach files by dragging & dropping or selecting them Remove 0 Files Copy 0 Files 🗑️ 📁 📄

Drop files here to upload

 valve.png

📄 🗑️

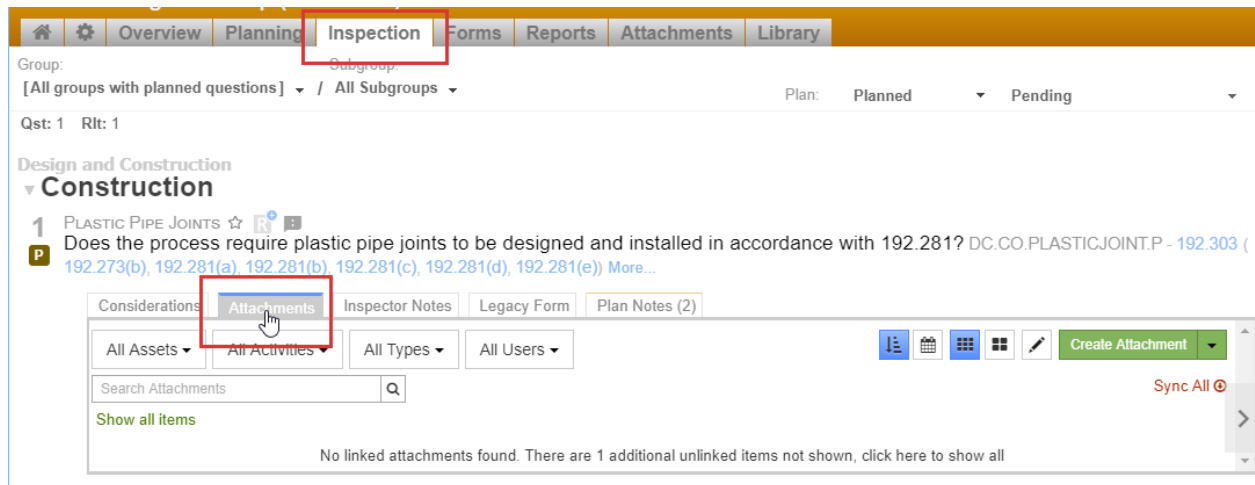
4. Add a title and perhaps some notes to complete the File attachment.

When a “photo observation” is created in IA Mobile, it comes in as a “File” attachment in IA Desktop.

## Step 10.3: Attachment linking in context

IA also supports “attachments” which can be linked to nothing except the inspection, or further linked to questions, results, assets, activities and forms. Attachments can be files, photos, notes or structured observations such as CP readings. Let’s create a few more attachments to practice linking.

1. Move to the Inspection tab
2. Click the “Attachments” tab on any question.



3. Click the green “Create New Attachment” button and select “Note”
4. Each attachment can be “linked” to multiple entities via the link selectors at the top

### Attachment Details

Basic info

Title: Note - DK - 9:30am

Links:

Questions

Results

Assets

Activities

Forms

AR.PTI.PRESSTESTACCEPP

Select Results

Select Assets

Office

Select Forms

Notes

Files

Attach files by dragging & dropping or [selecting them](#)

Drop files here to upload

5. Attachments can be added at the inspection-level on the “Attachments” tab, at the question level on the “Inspection” tab and at the result level on any result tab. Try navigating to each of these levels and adding an attachment from that point. Note how the default links change depending on where you are adding it from.
6. You can control how much space is allotted (and how much information is displayed) for each attachment via the buttons provided. Try the different settings to see the different effects.

Attachment Details

DoneCancel

Basic info

12/30/2022  
Creator: David King  
[Remove Attachment](#)

Title: Note - DK - 9:30am

Links:

QuestionsAR.PTI.PRESSTESTACCEP.PSelect ResultsAssetsSelect AssetsActivitiesOffice

FormsSelect Forms

Notes

Files Attach files by dragging & dropping or [selecting them](#)

Drop files here to upload

valve.png

attachment.docx

7. You can link and unlink attachments to the current context (question, result etc) with one click via the links provided on the attachment tile.

## Assessment and Repair

## ▼ Integrity Assessment Via Pressure Test

3

P

G

TEST ACCEPTANCE CRITERIA AND PROCEDURES ☆ R !

Were test acceptance criteria and processes sufficient to assure the basis for  
 192.503(a) (192.503(b), 192.503(c), 192.503(d), 192.505(a), 192.505(b), 192.505(c), 192.505(d),  
 192.513(c), 192.513(d), 192.921(a)(2)) More...

Considerations Attachments (1) Inspector Notes Plan Notes (2)

Create Attachment ▼ Sync All

Assets	Activities	Questions
All Assets ▼	All Activities ▼	AR.PTI.PRESSTESTACC..
Creators	Date Range (Set to Earliest)	(Set to Latest)
All Users ▼		

Search Attachments 🔍 Showing 1 of 2 Show all attachments ⬇️ ?

**Note - DK - 9:30am** 12/30/2022 (DK)

2 Files 
 1 Link

Th Unlink this attachment from this question

- Link an attachment to two different questions and then click the '2 links' link to see what is displayed. You should be able to navigate quickly between the two questions that share an attachment. Attachments are not "owned" by any link-point, they are simply pointed to. Before removing (or modifying) an attachment, it is a good idea to check these links to confirm it would not be better to just leave the attachment and unlink it from the current context instead.
- Linking to a question and linking to a result are different things. Link an attachment to a question, and then link it to one of the question's results. Check the link list to see the difference.

## PHMSA IA-Desktop Basic Operations Workshop

Design and Construction  
▼ **Construction**

PLASTIC PIPE JOINTS ⓘ  
Does the process require plastic pipe joints to be designed and installed in accordance with 192.281? DC.CO.PLASTICJOINT.P - 192.303 (192.273(b), 192.281(a), 192.281(b), 192.281(c), 192.281(d), 192.281(e)) More...

Considerations Attachments (1) Inspector Notes Legacy Form Plan Notes (2)

All Assets ▼ All Activities ▼ All Types ▼ All Users ▼

Search Attachments

Show all items

Comments ab... 2 links | Unlink 10/25/2018 (ST)

This is my note.

There are 1 additional unlinked items not shown, click here to show all

Add a Result ▼ Pending for All Assets

Pending ▼ for All Assets ▼

Text entered here will be part of the permanent inspection record when this inspection is locked.

Result Notes

Click to edit.

Attachments

Attachment items linked to this result are highlighted in yellow. Click the link/unlink on each item to change link status. Open the item to see more linking options.

All Assets ▼ All Activities ▼ All Types ▼ All Users ▼

Search Attachments

Show only items linked to this result

Comments ab... 2 links

This is my note.

Linked to

- Questions
- DC.CO.PLASTICJOINT.P
- Results
- DC.CO.PLASTICJOINT.P - Pending

Link 10/25/2018 (ST)

Sync All ⓘ

Delete this result >

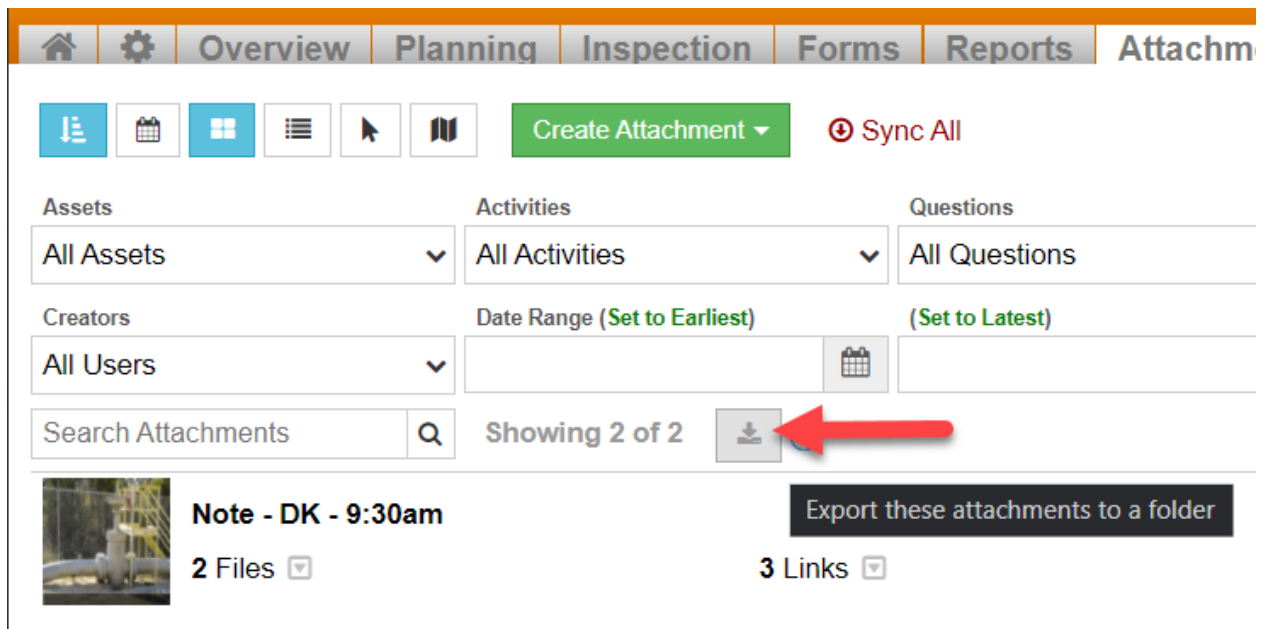
**This note is attached both to the question and the Pending result. There is only one note, it is presented in both contexts because it is linked to both contexts.**

10. Link an attachment to an UNSAT result. After that, have a look at the attachment's representation in the lists. You should see an "evidence" marker next to it.

## Step 10.4: Exporting Attachments

Most inspection information can be exported from IA Desktop via the Reports tab, however there is one export feature that can be found on the Attachments tab. If you wish to export attachments and associated files, you can do so by following these steps:

Using the controls above the attachment list on the attachment tab, filter attachments to those you wish to export, and then click the “download” icon to begin the export process:



1. When a Windows File Explorer window appears, you will be able to select a location to save the Attachment Export. Please note that exporting to a shared/network drive can take an extremely long time and at times may not complete successfully. Because of this, we highly recommend saving the Attachment Export to your Desktop. When the export is complete, you may then move it from your Desktop to the desired location.
2. After selecting a location to save the Attachment Export, you will see the “Attachment Export Progress” modal appear. Note that all attachment files need to be downloaded from the server. If this has not been done already, the export process may take longer (see “Downloading Files: ... files remaining”)

## Attachment Export Progress

Please wait while your export is compiled

You will be prompted to save the export when the required data is loaded.

### Process Checklist

<input checked="" type="radio"/>	Syncing Inspection	100% complete
<input type="radio"/>	Downloading Files	83 files remaining
<input type="radio"/>	Writing Metadata	
<input type="radio"/>	Copying Files	
<input type="radio"/>	Requesting Directory	
<input type="radio"/>	Saving Export	

Note: The attachment export feature is in "beta" and changes are expected.  
Your feedback is welcomed at [ia-support@dot.gov](mailto:ia-support@dot.gov).

Cancel

- When the Export is complete, IA Desktop will alert you via the progress modal and you may click the "Open Folder" button to be taken to the Export folder.

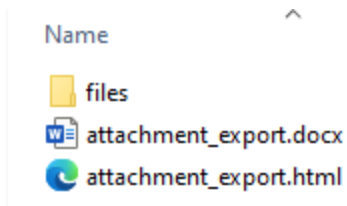
### Export Complete

The attachments were exported successfully.

Open Folder

- The Word document will contain links to any associated attachment files (images, Word docs, PDFs, etc). These full-sized files are included in the export folder, in the "files" folder. **For the links in the Word document to function, the entire folder must be present and kept in the same order/structure as when it was exported from IA Desktop, and internal folders/files should not be renamed.**





5. Open the Word document to get familiar with this export.

*Important: If you wish to share the attachment export with others, please ensure you copy/send the entire attachment export folder. The MS Word document produced by the export may include links to files and images. In order to preserve those links, do not move or rename any files/folders within the attachment export folder.*

It is highly recommended to only run the Attachment Export when IA Desktop is connected to the internet. Since your local machine may not yet have all the associated files downloaded, the exporter will fetch the files. Without an internet connection, the export may be incomplete due to missing attachment records or missing files/images. If you attempt to run the export while disconnected, you'll see the following message:

**Tip**

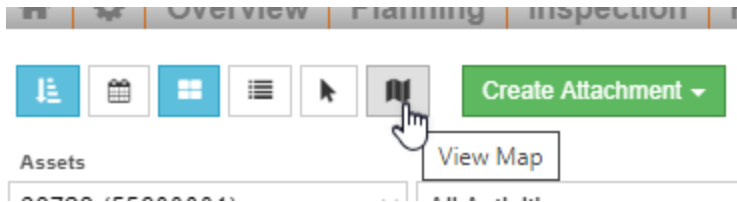
You are currently disconnected. Running the attachment export offline may result in missing attachment records or missing files/images. Are you sure you want to continue with the export?

Cancel

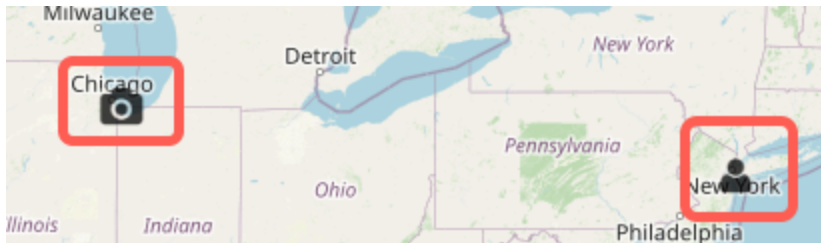
Yes, continue

## Step 10.5: Viewing Attachments on a Map

If you or a teammate has been using IA Mobile to add attachments to an inspection, there may be some attachments that contain location information. These can be seen by clicking the “map” icon at the top of the attachments tab:



You can interact with these attachments by hovering over or clicking the icons on the map:





## Lesson 11: Reporting

### Step 11.1: Reporting

IA can generate many reports. Except for the Supervisor's report, the reports available in IA are focused on the execution of a single inspection, not cross-inspection review.

Reports in IA are divided into two categories

- a) Local– these reports function without a connection and are based solely on local data
- b) Remote – these reports require a connection to function (they are executed on the server, not the client).

Each report has a set of links that allow export to external documents and options settings. You'll need to use these links in the next exercise.

[◀ Back to Reports](#)
[Print](#) | 
 [Export to Word](#) | 
 [Export to Excel](#) | 
 [Show Options](#)

The following exercises can be performed individually or as a group.

#### Export Questions

1. Use the Export Questions report to create a Word document of all the planned questions in your inspection.
2. Use the Export Questions report, and the Display Type = Tabular to create an Excel workbook of all the planned questions in your inspection.
3. Use the Group/Subgroup selector in the Export Questions report to winnow your report down to a single subgroup (click "Show options" to see these filters plus others)
4. Explore what the other options on the Export Questions report will do (start by using some of the presets provided).
5. Ask your IAT member what your region's policy is on providing exported questions to Operators.

#### Validation Report

**Tip** *The validation report is the most important report in IA. It helps assure the quality of your inspection data. Use it often.*

1. Run the validation report. Find the issues and correct them.
2. Run the validation report with the "Include Rule Inventory" option checked. Create violations of at least three rules in your inspection. Then, re-run the report, see the items and fix them.

#### Inspection Results Report

6. Use the IRR report to list your results. Use the links in the report to jump to the results.

## Results and Notes Review

This report is intended for review of long text. It also includes spell-check and is recommended for review prior to requesting approval of the inspection.

1. Make some spelling errors in a result
2. Run the report with the appropriate Long-Text Format to see spelling errors.
3. Correct the errors and re-run the report.

## Inspection Output (IOR)

**Tip** The IOR is the replacement for the PIM (Post Inspection Memo) as a final report for the inspection.

1. Run the IOR, test the various options.
2. Add an inspection summary (on the overview tab) and then re-run the IOR
3. Note the planned and required columns in the Scope (Assets) table. They are probably the same value for each row.

## Supervisor's Report

This report is primarily targeted at users who oversee multiple inspections. However, it can be useful for others as well. To view the Supervisor's Report, click the "More Reports" button at the end of the list, and then select "Supervisor's Report" from the "Select a Report" dropdown.

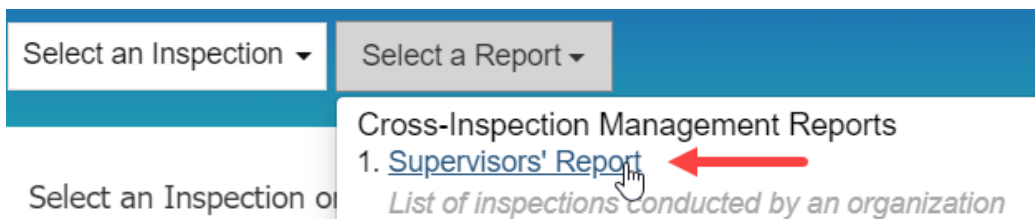
### Planning and Status Reports

1. [Requested Items](#)  
*Requested Item status information (current/all activities)*
2. [Construction Daily Report](#)  
*Construction Daily Reports and Observations*

More Reports



Open a report window with access to reports from other inspections and cross-inspection reporting. Including Supervisor's reports.



1. Run the supervisor's report, test the various options.

2. Note how the “Inspection Name” column is a link for some inspections, while “Reports” is a link for all.

### More Reports

While we have this “More reports” window open, let’s see how else we can utilize it.

In addition to running the Supervisor’s Report, from this window you can select to run any IA report for an inspection other than the one that you have currently open in the main IA window. For example, you can select an inspection that you are a team member of (or a locked inspection) via the “Select an Inspection” dropdown. From the “Select a Report” dropdown, you can then choose a report you’d like to run on the selected inspection.

JP Workshop prep 2023 ▾ Select a Report ▾

Select an Inspection or Report ▾

- Validation Report
  - 1. Inspection Validation
    - Lists any inspection aspects not complying with required business rules*
- Results Reports
  - 1. Inspection Results (IRR)
    - Provides tabular listing of results across entire inspection*
  - 2. Results and Notes Review
    - All results and notes presented for review in document format*
  - 3. Post-Visit Verbal Briefing
    - Unsat and Concern results in document format for verbal review*
  - 4. Post-Inspection Written Preliminary Findings
    - Written preliminary findings*
  - 5. Inspection Output (IOR)
    - Verbose report providing planning and outcomes.*
- Planning and Status Reports
  - 1. Requested Items
    - Requested Item status information (current/all activities)*
  - 2. Construction Daily Report
    - Construction Daily Reports and Observations*
- Cross-Inspection Management Reports
  - 1. Supervisors' Report
    - List of inspections conducted by an organization*

You now have the advantage of having two IA Desktop windows open - each looking at data from a different inspection. For example, you can have the current inspection open in one window, planning this inspection. In the second window, you can have a report from a relevant, locked inspection open to help inform your planning. See below for an example of how IA can be used side-by-side to compare information from two different inspections:

## PHMSA IA-Desktop Basic Operations Workshop

The screenshot displays the PHMSA IA-Desktop software interface. The top navigation bar includes tabs for Overview, Planning, Inspection, Forms, Reports, Attachments, Library, and Help/Tools. The main window is titled 'Results and Notes Review' and shows a list of inspection results for 'Lauren's Dec 7'. The results are organized into a table with columns for Question Title, ID, and Result. The results are filtered by 'Unsat. Concern' and 'EXCLUDE Inspector's notes from report entirely'. The table shows two results: 'Control Room Management, CR.CRMGEN.CRMIMPLEMENT.R' and 'Plastic pipe - Qualifying Joining Procedures, DC.CO.PLASTICJOINTPROCEDURE.R'. Both results are marked as 'Unsat'.

**Legend**

- Unimplemented
- Implemented
- Full
- Partial
- \*Full = planned or excluded

**Plan Items**

ID	Item	88723	88725	85398
237	Baseline Pro...	P	R	O
239	Baseline Pro...	P	R	O
9	DC (WELDI...	P	R	O

**Implementation Activities**

ID	Activity	Start	End
599	Office		
103	Field 88723		

**Results and Notes Review**

Print | Export to Word | Export to Excel | Hide Options

Asset: For any related Asset (Including no Asset)

Activity Plan: NO PLAN FILTER

Results to Include (on selected assets): Unsat. Concern

Temporary Inspector's Notes (n/a to LOCKED inspections): EXCLUDE Inspector's notes from report entirely

Result Text Options: Display result notes and issue summary

Include Standard Issues: No

Long-Text Formatting: Formatted

**Refresh**

CRM, SCADA, and Leak Detection : General (CR.CRMGEN)

Question Title, ID Control Room Management, CR.CRMGEN.CRMIMPLEMENT.R

**Question** 3. Were procedures approved, in place, and implemented on or before the regulatory deadline?

References 192.631(a)(2)

**Result** **Unsat**

Assets Covered Sonoma Division (85398 (10))

Issue Summary --

Design and Construction : Construction (DC.CO)

Question Title, ID Plastic pipe - Qualifying Joining Procedures, DC.CO.PLASTICJOINTPROCEDURE.R

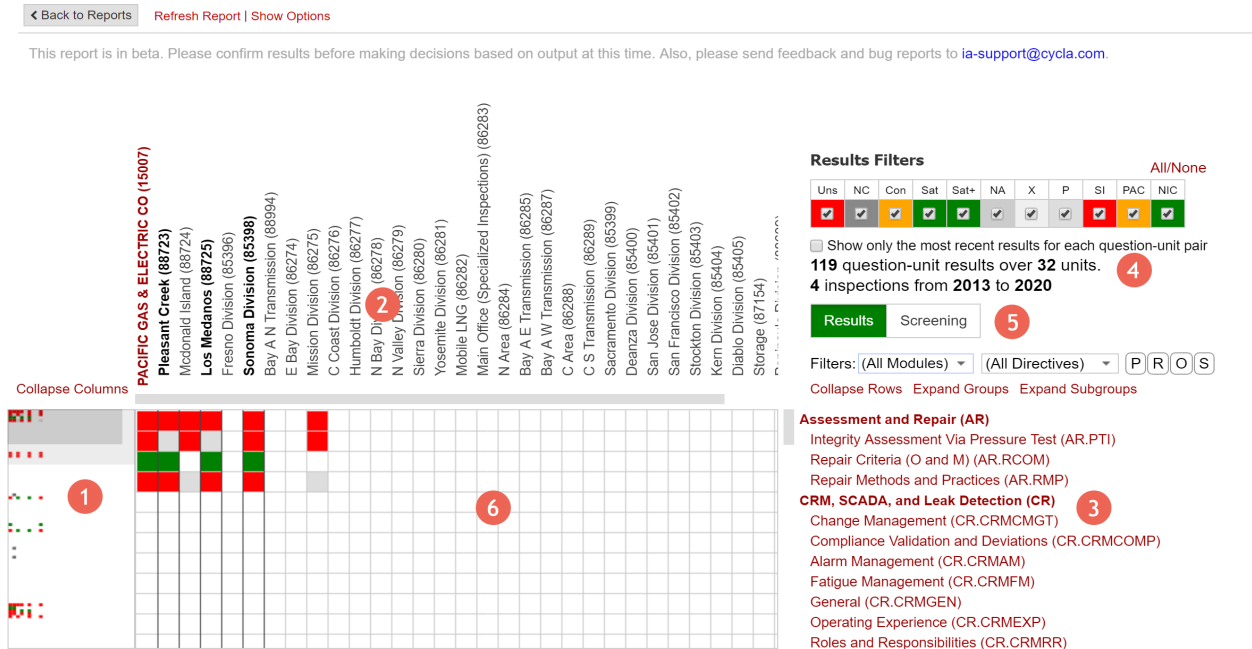
**Question** 3. Have plastic pipe joining procedures been qualified in accordance with 192.283?

Try any reports you have not yet tried and then move on to the next step.

## Step 11.2: Reporting – Coverage Heatmap report

The Coverage Heatmap report is more of a tool than a report. Let's look at it specifically.

1. Run the report for your inspection and have a look at the results. Depending on where you recorded your results, your display will differ, but the layout should look similar to the image below.

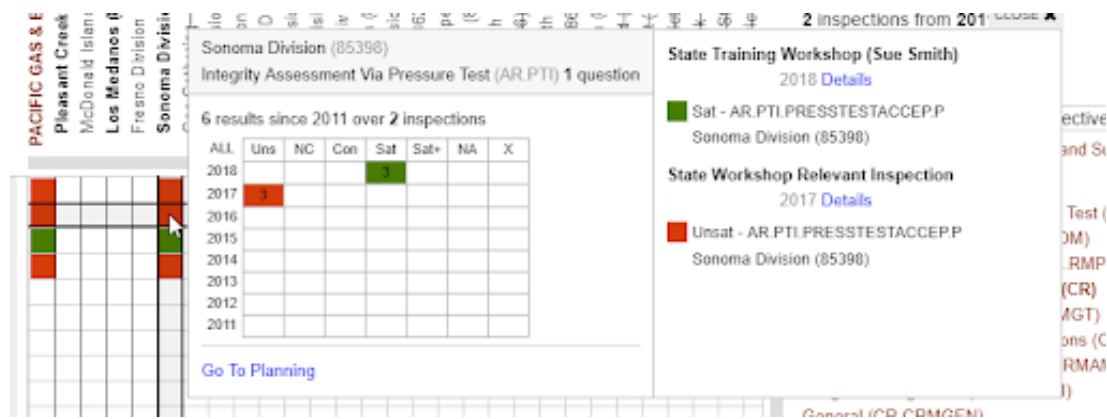


Coverage heatmap layout.

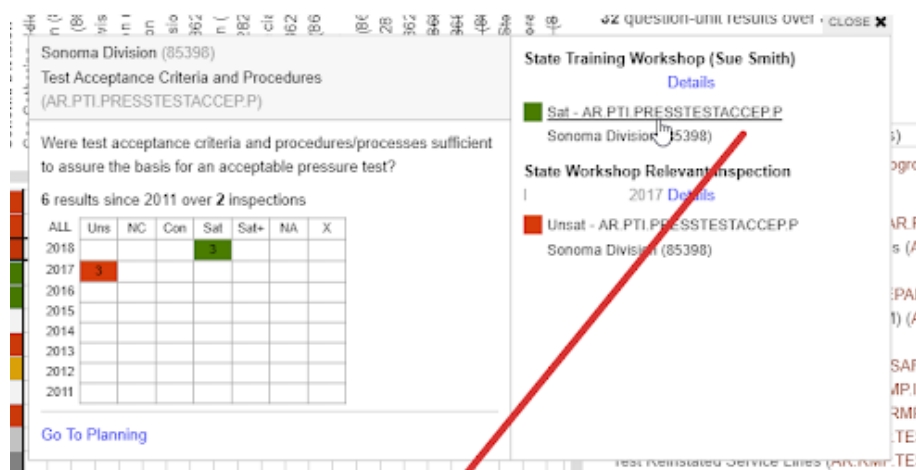
- 1) Navigation grid, slide the grey region around to scroll up/down left/right.
- 2) Units (Note: these are UNITS or External Unit Ids, not Assets (which can be a combination of multiple units))
- 3) Question Content (organized by Module/Submodule/Question)
- 4) Filter Controls
- 5) Result-display mode (see below)
- 6) Result grid

The Coverage Heatmap is a tool to look at your inspection's results along Unit X Question coordinates. Consider it a "map" of results collected. Each cell represents a "location" where results can be collected. Some cells, such as those corresponding to Operators or Modules and Submodules are representative of the aggregation of all the results collected "under" them. Just like the planning grid, you can expand and collapse the question content rows to "drill down" into the results.

Also, the results under each cell can be viewed by hovering over it, and drilled-into by clicking.



Finally you can see a summary of the result (notes etc) by clicking on the item in the result list.



The 'Result Details' window displays the following information:

- State Training Workshop (Sue Smith)**
- California Public Utilities Commission, 2018
- Test Acceptance Criteria and Procedures**
- AR.PTI.PRESSTESTACCEP
- Were test acceptance criteria and procedures/processes sufficient to assure the basis for an acceptable pressure test?
- Sat / Sat** for Pleasant Creek, Los Medanos, Sonoma Division
- Open Result** button (with a red arrow pointing to it and the text 'Navigate to the result on the inspection tab here.')
- OK** button

So, in summary the heatmap provides a way to look over the entire set of results for your inspection.

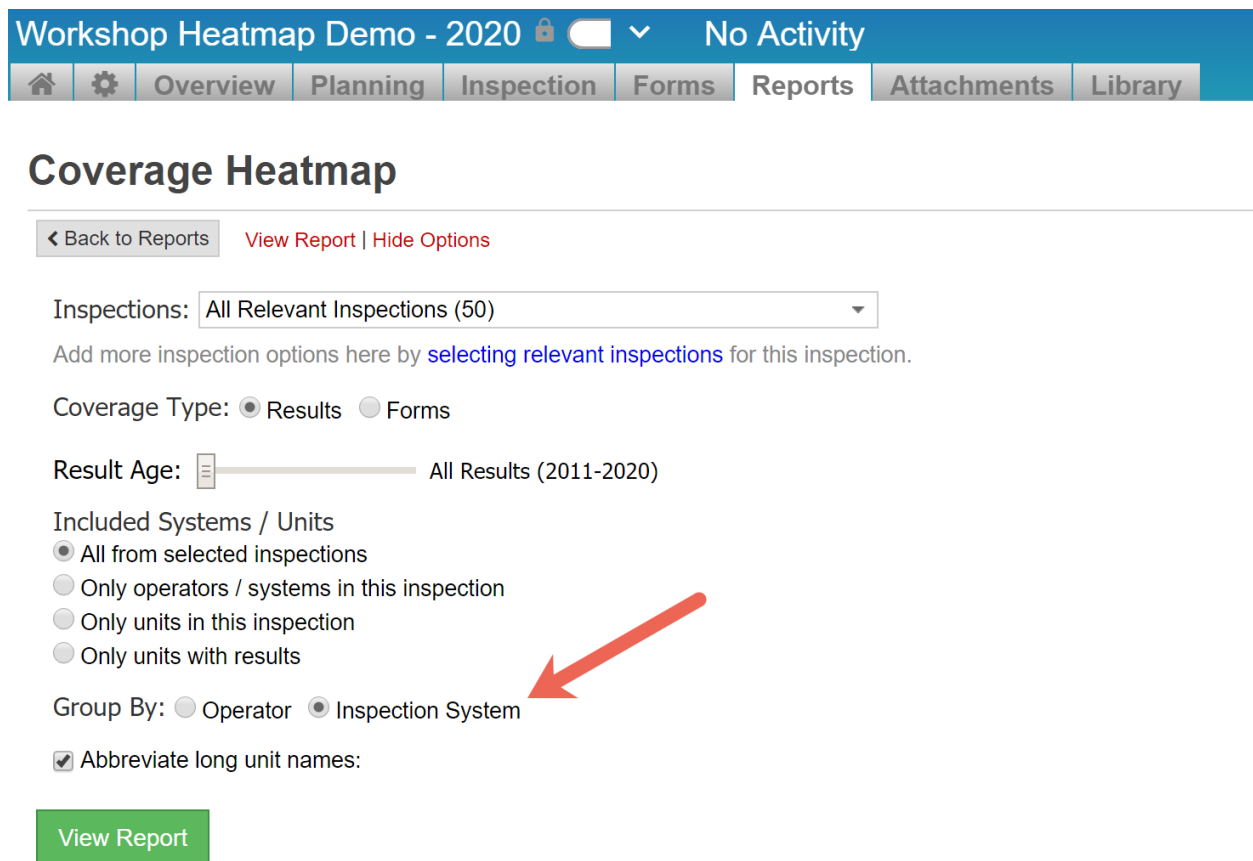




However, the primary purpose for the Coverage Heatmap is actually to look at *previous* inspections results. If you expand the reports Options, you'll see that all the relevant inspections flagged for this inspection are available. In our example here, we have only one other relevant inspection. It is difficult to review this feature without real data, so let's watch an instructor demo and follow along in 11.3 and 11.4. .



## Step 11.3: Reporting – Coverage Heatmap report part 2

In order to see how this works, your instructor will give a demo of the following steps (there is no need to complete these steps on your own, just follow along with the instructor's demo). In this inspection, we have flagged around 50 previous inspections for review.

Before running the report, select the "Inspection System" option in "Group By:"



Workshop Heatmap Demo - 2020   No Activity

  Overview Planning Inspection Forms Reports Attachments Library


### Coverage Heatmap

[← Back to Reports](#) [View Report | Hide Options](#)

Inspections:

Add more inspection options here by [selecting relevant inspections](#) for this inspection.

Coverage Type: ☒ Results ☐ Forms

Result Age:  All Results (2011-2020)

Included Systems / Units

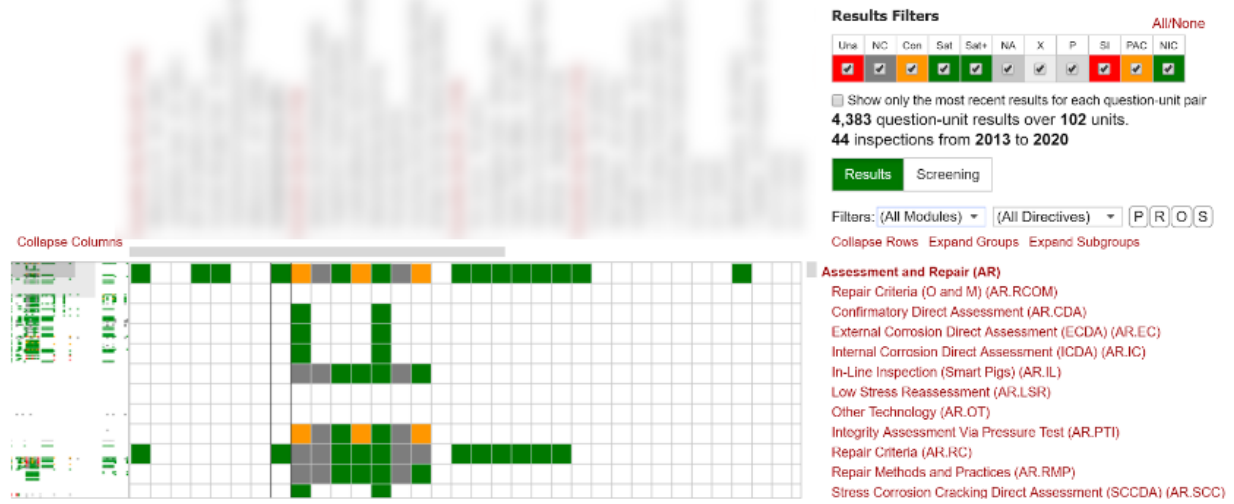
- ☒ All from selected inspections
- ☐ Only operators / systems in this inspection
- ☐ Only units in this inspection
- ☐ Only units with results

Group By: ☐ Operator ☒ Inspection System

☒ Abbreviate long unit names:

[View Report](#)

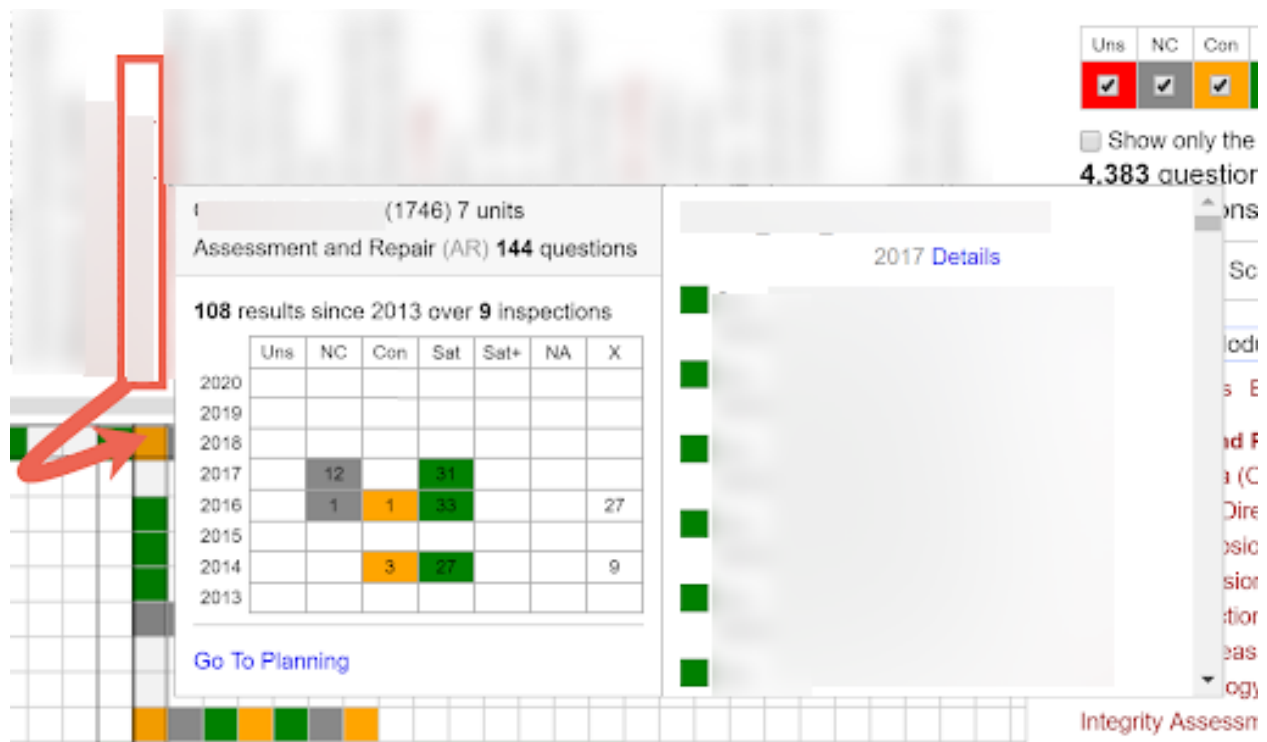
Run the report and you should see the following:



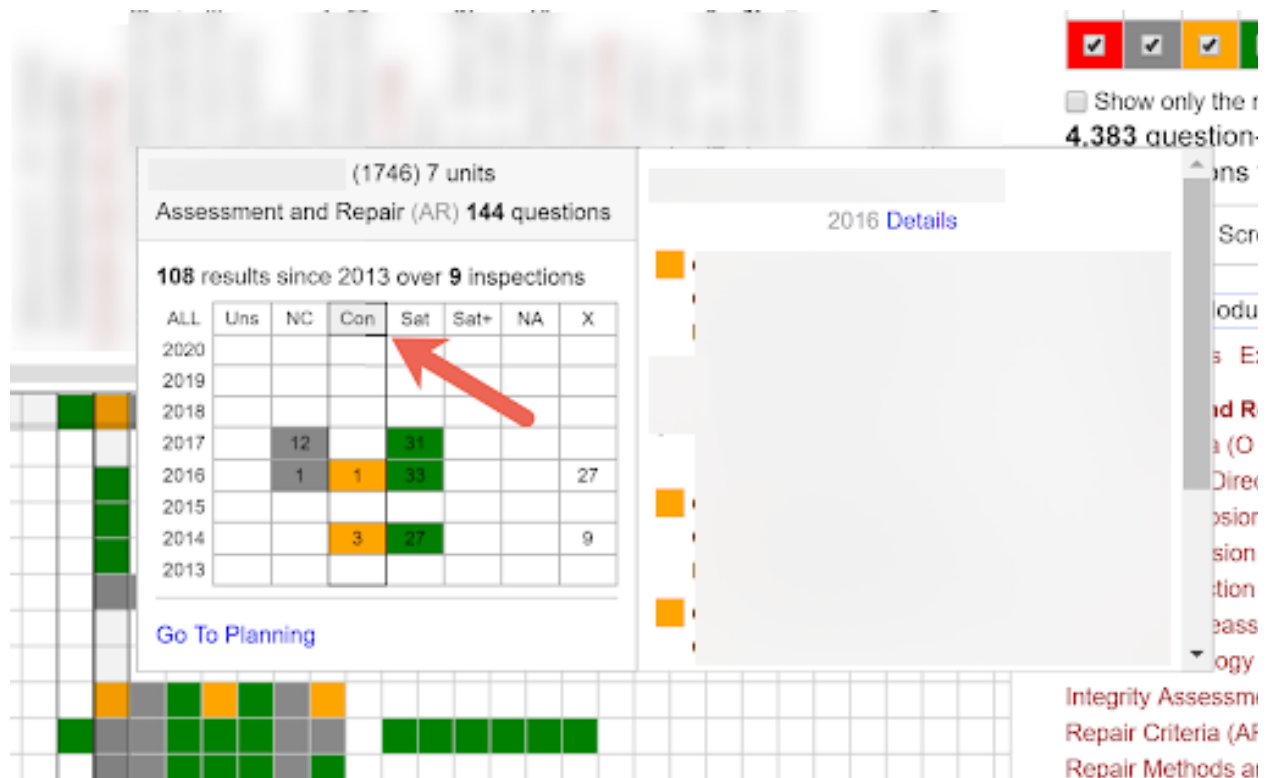
Over 4K until-level results displayed in the heatmap, collected over 44 inspections.

Explore the heatmap by taking the following steps

1. Drill down into a system-level cell by clicking on a cell under one of the System column headers.



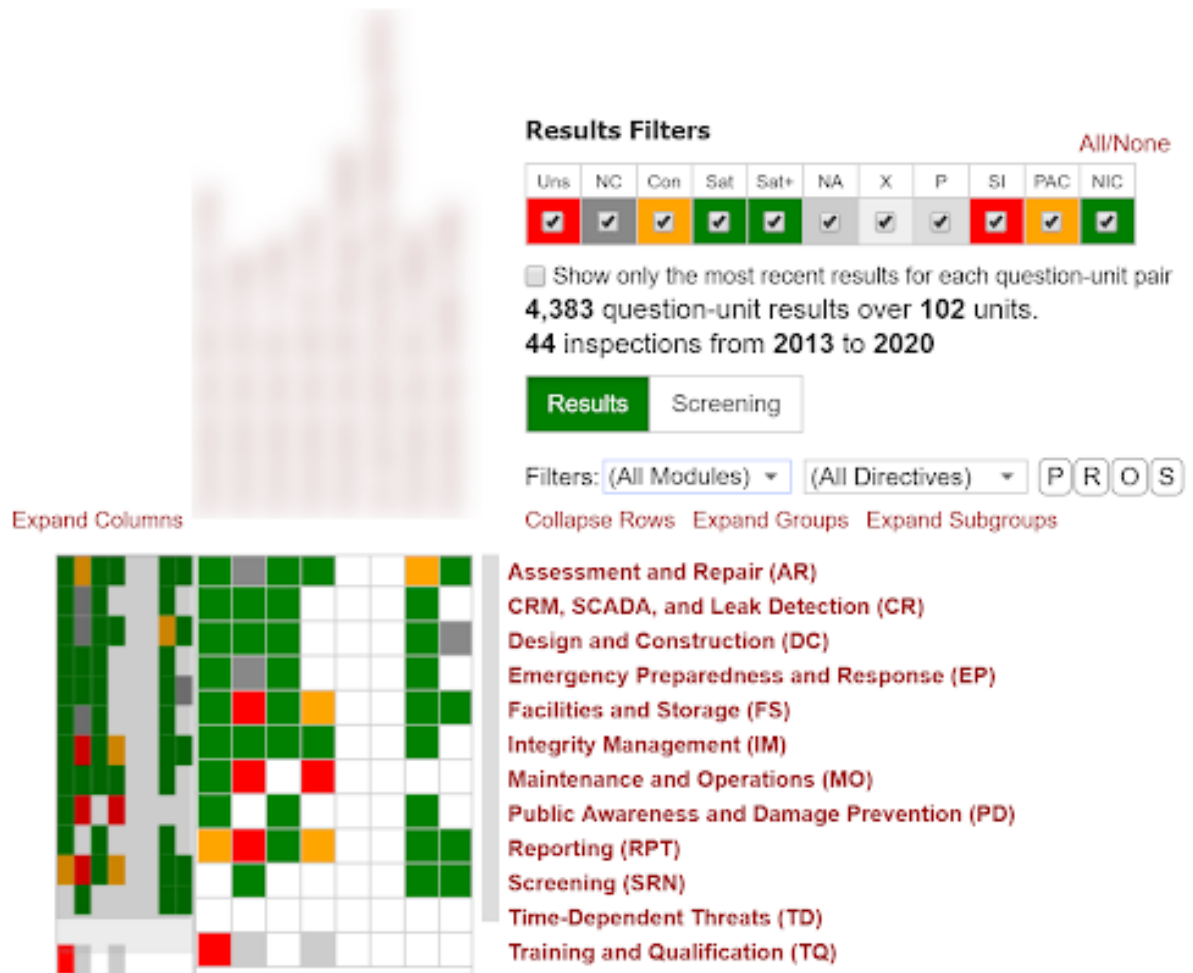
2. Filter the list of results by clicking on cells (including row and column headers)



Here, we have filtered to just Concern valued results by clicking the column header.

3. Reset the filter by clicking the “All” cell in the upper left of the result grid.
4. Drill down into some individual level results.

- Experiment with the expand/collapse options for rows and columns. Can you make the display look like this?



**Results Filters** All/None

Uns	NC	Con	Sat	Sat+	NA	X	P	SI	PAC	NIC
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

☐ Show only the most recent results for each question-unit pair  
**4,383** question-unit results over **102** units.  
**44** inspections from **2013** to **2020**

**Results** Screening

Filters: (All Modules) (All Directives) **P R O S**

Collapse Rows Expand Groups Expand Subgroups

**Expand Columns**

**Assessment and Repair (AR)**  
**CRM, SCADA, and Leak Detection (CR)**  
**Design and Construction (DC)**  
**Emergency Preparedness and Response (EP)**  
**Facilities and Storage (FS)**  
**Integrity Management (IM)**  
**Maintenance and Operations (MO)**  
**Public Awareness and Damage Prevention (PD)**  
**Reporting (RPT)**  
**Screening (SRN)**  
**Time-Dependent Threats (TD)**  
**Training and Qualification (TQ)**

The Coverage Heatmap can also help you find specific conditions in the data that may indicate the need for additional inspection activity.

## Step 11.4: Reporting – Coverage Heatmap report part 3

Click the “Screening” mode selector to put the display in Screening mode. This changes the display and reveals a set of target condition options.

### Target Conditions

Average age of most recent result ☒  50

Concern result with no results in subsequent inspections ☒

Excluded with results ☒  50

Concerns without follow-up ☒  50

NCs without follow-up ☒  50

Result audit / final value mismatch ☒  50

Unsat with action of "do not proceed" ☒  50

1. Hover over each ? marker to see what condition is being represented by each control.
2. With the checkboxes, turn off all the conditions except “Concerns without follow-up” and “NCs without follow-up”.

### Target Conditions

Average age of most recent result ☐  50

Excluded with results ☐  50

Concerns without follow-up ☒  50

NCs without follow-up ☒  50

Result audit / final value mismatch ☐  50

Unsat with action of "do not proceed" ☐  50

The idea behind the screening condition heuristics is to find conditions that may warrant additional inspection activity. In this case, we are looking for Concern and NC results for which there has not been (as yet) a subsequent result collected for the same question and unit. These situations may warrant a follow up review on subsequent inspections. If your inspection planning process allows for targeted inspection, you may wish to use the coverage heatmap in this way to locate potential areas for review.

3. Experiment with the various screening condition filter heuristics.



## Presentation: IA Reports Overview

Notes:



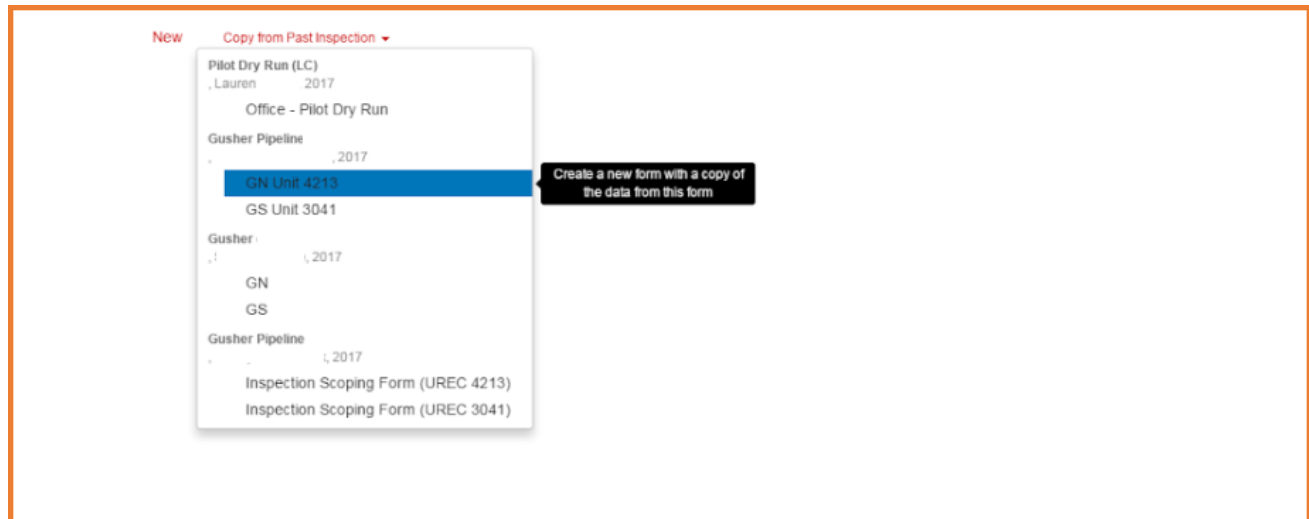
## Lesson 12: Data Forms

### Step 12.1: Creating Data Forms

IA contains several data forms. All are housed under the “Forms” Tab.

Home	Settings	Overview	Planning	Inspection	Forms	Reports	Attachments	Library
<p>▼ <b>Attendance</b> (0/0)</p> <p>▼ <b>OPA</b> (0/0)</p> <p>▼ <b>OPA Exercise</b> (0/0)</p> <p>▼ <b>Breakout Tanks</b> (0/0)</p> <p>▼ <b>Control Room Management</b> (0/0)</p> <p>▼ <b>Construction Daily</b> (0/0)</p>								

**Tip** *It is possible to copy form data both from this current inspection's forms, as well as from previous related inspections. The inspections available for recall are configured in the “relevant inspections” sections on the configuration page.*



1. Create at least one instance of each form to become acquainted with the content in each.



## Lesson 13: Final Challenges

You are almost done, here are a few challenges to test your knowledge of the concepts you have learned in the steps above.

1. Start from scratch
  - a. Create a new inspection
  - b. Configure it (and select a few relevant inspections)
  - c. Plan it (any way you want)
  - d. Get the plan approved by someone in your group
  - e. Answer two questions on desktop
  - f. Add a requested item from desktop
  - g. Add an attachment from desktop
  - h. View the heatmap report
  - i. Run the validation report
  - j. Fix any validation issues
  - k. Run the IOR

Congratulations! You've completed the objectives of this workshop. Remember that you can reach out to [IA-support@dot.gov](mailto:IA-support@dot.gov) if needed.



## IA Glossary

**Activity (also see Implementation Activity):** A tool for dividing the plan into separate, scheduled sections during which inspectors will have contact with the operator. Activities typically correspond to ‘visits’ to the operator.

**Attachment (also known as observation):** An item such as a note, OQ task, requested item, electrical reading, etc that is related to the inspection. These can be linked to particular activities, assets, forms, questions or results, and thus used as evidence for unsatisfactory results. (referred to as “attachments” in IA Desktop and “observations” in IA Mobile)

**Asset:** A “container” for one or more units to be investigated during the inspection.

**Directive:** A predefined set of questions that assist the inspector in consistently evaluating specific compliance topics.

**Implementation Activity (also see Activity):** A tool for dividing the plan into separate, scheduled sections during which inspectors will have contact with the operator.

**Inspection Assistant (IA):** The PHMSA Data System used for reviewing trends from past inspections, planning an inspection, and conducting an inspection. Users primarily interact with this system via two ‘client’ applications: IA Desktop (IAD) and IA Mobile (IAM).

**Multi unit asset (MUA):** An asset that contains multiple units (as opposed to a single unit asset). MUAs are typically used for planning procedure (P) and records (R) questions that will apply to multiple units. Setting up a MUA for these sorts of questions can make planning and assigning results easier, and generally ensure that appropriate ‘coverage’ is assigned for questions asked.

**Observation (also known as attachment):** An item such as a note, OQ task, requested item, electrical reading, etc that is related to the inspection. These can be linked to particular activities, assets, forms, questions or results, and thus used as evidence for unsatisfactory results. (referred to as “attachments” in IA Desktop and “observations” in IA Mobile)

**Observation questions:** Questions that involve the observation of operator personnel performing various tasks and/or observing various locations of the pipeline and associated facilities.

**Operator:** The operator of the pipeline unit(s) to be investigated. Each inspection in IA has a ‘primary operator’ and may also have one or more secondary operators when the assets under review are held under multiple operator IDs.

**Plan:** A selection of question content that will be used to conduct the inspection.

**Procedure questions:** Questions that involve process oriented reviews such as programmatic and/or procedural requirements.

**Records questions:** Questions that specify the review of operator records, regardless of where the records may be maintained.

**Single unit asset:** An asset that only contains a single unit (as opposed to a multi unit asset). In general this is the preferred way of collecting results.

**SMART:** SMART activities were once linked to IA inspections and implementation activities and used by PHMSA to track time/resources. This internal PHMSA system has been replaced by WMS which interoperates with the IA System directly, reducing the need for manual linkage.

**Unit:** A segment of a pipeline system (or in some cases, if the system is small, an entire pipeline system).

**WMS (Work Management System):** WMS activities are linked to federal inspection activities and used by PHMSA to track time/resources

## Please, help us improve this workshop.

Please jot down responses to the following questions and hand to your instructor.

1. What topic areas do you feel you are strongest on now?
2. What is the most important/useful thing you learned today?
3. What areas did we miss or should have spent more time on?
4. Generally, what should we do differently next time?